

# EXHIBIT 1

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8 **UNITED STATES DISTRICT COURT**  
9 **NORTHERN DISTRICT OF CALIFORNIA**  
10 **SAN FRANCISCO DIVISION**  
11

13 **SAN FRANCISCO HERRING**  
14 **ASSOCIATION; and DAN CLARKE,**

15 Plaintiffs,

16 v.

17 **PACIFIC GAS AND ELECTRIC**  
**COMPANY; and PG&E CORPORATION,**

18 Defendants.  
19

Case No.

**COMPLAINT**

**DEMAND FOR JURY TRIAL**

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1 Plaintiffs the SAN FRANCISCO HERRING ASSOCIATION (“SFHA”) and DAN  
 2 CLARKE (“Clarke,” collectively with SFHA (“Plaintiffs”)) allege on information and belief,  
 3 except as indicated, as follows:

#### 4 INTRODUCTION

5 1. This action arises out of contamination caused by manufactured gas plants  
 6 (“MGPs”) owned and operated by PG&E in the Marina and Fisherman’s Wharf neighborhoods  
 7 of San Francisco, the Fillmore MGP, the North Beach MGP, and the Beach St. MGP.



18 2. MGPs were highly polluting, low-tech refineries that were used, in the  
 19 nineteenth and early twentieth centuries, to create gas from coal, and later oil, and a  
 20 combination of coal and oil that was then pumped in pipes to (mainly residential) consumers for  
 21 lighting, cooking and heating in their vicinity.

22 3. The historical footprint of these facilities, which as the above map shows  
 23 encompassed an area equivalent to several city blocks, and the areas in their vicinity are  
 24 commonly contaminated with a variety of solid and/or highly toxic waste (collectively, “MGP  
 25 Wastes”), and the above MGP sites are no exception. The soil and groundwater in the footprint  
 26  
 27  
 28



1 and vicinity of these MGPs is highly contaminated with, in particular, MGP Wastes that contain  
 2 polycyclic aromatic hydrocarbons or PAHs at levels highly toxic to humans and other animals,  
 3 including, in particular, marine life during early life stages.

4 4. The MGP Waste contamination from the above MGPs presents an imminent and  
 5 substantial endangerment to human health and the environment, in particular, herring spawned  
 6 in waters near offshore of the sites, and may present such an endangerment in the future.  
 7 Herring are not only important to SFHA's members, they are also a keystone species in the San  
 8 Francisco Bay and larger marine environment. Thus, harm to herring productivity and  
 9 abundance has broad environmental effects. PG&E has known about this danger since at least  
 10 the 1970s. Nonetheless, it did nothing to remedy it until just recently, when it was able to  
 11 negotiate an arrangement with the California Public Utilities Commission that allows it to shift  
 12 90% of the costs of remediation to ratepayers.

13 5. However, despite PG&E and/or its insurers being only on the hook for only 10%  
 14 of the cost of remediations, PG&E has not agreed to engage in even the testing necessary to  
 15 determine the full extent of the MGP Wastes contamination under homes, in gardens, in parks,  
 16 in groundwater, in the Bay's water, or in its submerged and tidal lands, let alone agree to  
 17 remediate such contamination sufficiently to address that endangerment. Rather, it has sought to  
 18 do only the bare minimum needed to shift and avoid liability and gain approval from compliant  
 19 regulators.

20 6. This action is necessitated by such conduct and seeks simply to require that  
 21 PG&E meet its responsibility to cleanup the toxic waste it has left place for over 100 years and  
 22 meet its other obligations in association therewith.

## 23 PARTIES

### 24 I. Plaintiffs

25 7. Plaintiff the **SAN FRANCISCO HERRING ASSOCIATION** ("SFHA") is a  
 26 California non-profit, unincorporated association whose membership consists of active San  
 27 Francisco Bay commercial herring fishermen and buyers. The San Francisco Bay herring  
 28 fishery is the only remaining urban commercial fishery in the United States and is the only



1 remaining significant commercial finfish fishery in San Francisco Bay. It is an artisanal fishery,  
2 in which small independent fishing boat owners/operators catch herring for a short period each  
3 winter when fish return to the San Francisco Bay to spawn. A small portion of the herring is  
4 harvested for the fresh fish consumption. The majority is harvested for its roe, which is a  
5 traditional component of Japanese cuisine, especially on special occasions. Many San Francisco  
6 Bay herring fishermen work together as husband and wife teams, working and sleeping on their  
7 boats during the season. A significant portion of the fishermen have been fishing for herring in  
8 the San Francisco Bay for many decades, including several who started fishing at or around the  
9 time the modern fishery was established in the early 1970s.

10 8. SFHA was formed to protect the San Francisco herring fishery, including  
11 without limitation the health and maintenance of the herring stock on which the fishery  
12 depends, and to advocate on behalf of its members' activities related to herring fishing,  
13 including protection of the San Francisco Bay herring stock. The SFHA's membership is made  
14 up by predominantly active commercial herring fishermen and its membership includes most, if  
15 not all active San Francisco Bay commercial herring fishermen. San Francisco Bay's  
16 commercial herring fishermen have for decades worked diligently to protect the health of the  
17 herring stock on which the fishery depends. This includes working closely with the California  
18 Department of Fish and Wildlife and the California Fish and Game Commission, with the active  
19 participation of other stakeholders, to ensure the amount of fish harvested does not weaken the  
20 strength of the stock or its capability to provide the broad range of ecological services it  
21 provides to the broader environment. This is done through a yearly quota setting process that  
22 sets the total amount of fish that can be harvested in the coming season based several factors but  
23 primarily the total spawning biomass of the previous season. As a result, San Francisco's  
24 herring fishery is considered one of the most sustainably managed fisheries in the world, and it  
25 is frequently cited as model therefor.

26 9. SFHA brings this action on behalf of its members, whose livelihood depends  
27 upon on the continued productivity and abundance of the San Francisco Bay herring stock.  
28 PG&E's unlawful contamination with MGP Waste of the shoreline, tidal and submerged lands

in areas of San Francisco Bay, including without limitation in the vicinity of San Francisco's Marina and Fisherman's Wharf neighborhoods, and its unlawful contamination of groundwater in San Francisco's Marina District and Fisherman's Wharf District, which is hydrologically connected to the San Francisco Bay, presents, and/or may present, an imminent and substantial endangerment to the environment in which San Francisco Bay herring stock spawn, leading to a decrease in the stock's productivity and abundance. SFHA has standing to pursue this action. SFHA and its individual members have suffered injury to concrete commercial interests in the San Francisco herring fishery, and face imminent continuing injury to those commercial interests, caused by PG&E's aforementioned contamination. Enjoining the PG&E to remediate MGP contamination in the tidal and submerged lands in areas of San Francisco Bay in the vicinity of San Francisco's Marina District and Fisherman's Wharf District and the groundwater in San Francisco's Marina District and Fisherman's Wharf District would redress these injuries. As SFHA's purpose is to protect the San Francisco Bay herring fishery, including the stock on which that fishery depends, the interests at stake in this action, including protection of the productivity and abundance of the San Francisco herring stock, are germane to the SFHA's purpose.

10. Plaintiff **DAN CLARKE** ("Clarke") is an individual residing at, and is the owner with his wife, through a living trust, of 1625 North Point St., San Francisco, California (the "Clarke Home"). Clarke Home, more specifically, means certain real property identified as assessor's parcel number 0460A-029 in San Francisco, California, 1625 North Point Street, San Francisco, California, together with all buildings, structures, fixtures, and every other type of physical improvement located at, on or affixed thereto, and all rights, including, without limitation, water rights, easements, licenses, permits, benefits, and interests appurtenant thereto or held by Clarke in connection therewith. Clarke and his wife reside at the Clarke Home and rent out an apartment in the Clarke Home on a short-term basis.

1 **II. Defendants**

2 11. Defendant **PG&E CORPORATION** is a corporation organized and existing  
3 under the laws of the State of California, with its principal place of business in San Francisco,  
4 California.

5 12. Defendant **PACIFIC GAS AND ELECTRIC COMPANY** is a  
6 corporation organized and existing under the laws of the State of California, with its principal  
7 place of business in San Francisco, California. Pacific Gas and Electric Company is the parent  
8 company of PG&E Corporation.

9 13. Defendants Pacific Gas and Electric Company and PG&E Corporation, with  
10 their respective predecessors, successors, subsidiaries, and parents, are referred to collectively  
11 herein as “PG&E” or “Defendants.”

12 14. PG&E owned and operated the North Beach MGP, the Fillmore MGP, and the  
13 Beach Street MGP during the relevant period and are responsible for the contamination caused  
14 thereby alleged herein.

15 15. At all relevant times, each of the Defendants was an agent, employee, servant,  
16 partner, alter ego, and/or joint venturer of his co-Defendant in the acts and omissions that have  
17 caused the injuries to Plaintiffs and was at all times, acting within the course and scope of said  
18 agency, employment, service, partnership, conspiracy, alter ego status, and/or joint venture.

19 **JURISDICTION**

20 16. This Court has jurisdiction pursuant to 28 U.S.C. § 1331, as this action arises  
21 under the laws of the United States, specifically, 33 U.S.C. §§ 1251 *et seq.* and 42 U.S.C. §§  
22 6901 *et seq.* This Court has supplemental jurisdiction over the claims brought herein that arise  
23 under California state law, as they arise from a common nucleus of facts.

24 17. An actual controversy exists between the parties within the meaning of 28 U.S.C.  
25 § 2201. This Court may grant declaratory relief, and additional relief, including an injunction,  
26 pursuant to 28 U.S.C. §§ 2201 and 2202, 33 U.S.C. § 1365, and 42 U.S.C. § 6972.

## VENUE

18. Venue lies in this judicial district pursuant to 28 U.S.C. § 1391(e), because a substantial part of the events or omissions giving rise to the claims at issue in this action occurred in this judicial district. The MGP waste contamination at issue is located in the City and County of San Francisco (“CCSF”), including without limitation the Marina and Fisherman’s Wharf neighborhoods and the waters of San Francisco Bay adjacent thereto. Furthermore PG&E is headquartered in the CCSF.

## INTRADISTRICT ASSIGNMENT

19. This action substantially arises out of actions in the CCSF. Thus, under Civil L.R. 3-2(d) this action is to be assigned to the San Francisco or Oakland Division.

## FACTUAL BACKGROUND

### **III. PG&E's Former Operation of MGPs in the Marina and Fisherman's Wharf Neighborhoods of San Francisco**

#### **A. Background - MGPs and Toxic and Solid Waste Associated Therewith**

20. As the name suggests manufactured gas plants (“MGPs”) were plants that manufactured gas used for lighting, heating, and cooking purposes throughout most of the nineteenth century and the first half of the 20th century. The manufacturing process for “synthetic fuel gases” (also known as “manufactured fuel gas,” “manufactured gas” or simply “gas”) typically consisted of the gasification of combustible materials, almost always coal, but also wood and oil, and, especially in the later period of their operations, a combination of coal and oil. The coal and/or other fuel stock were gasified by heating it in enclosed ovens with an oxygen-poor atmosphere. The fuel gases generated were mixtures of many chemical substances, including hydrogen, methane, carbon monoxide and ethylene, and could be burnt for heating and lighting purposes. Coal gas, for example, also contains significant quantities of unwanted sulfur and ammonia compounds, as well as heavy hydrocarbons, and so the manufactured fuel gases needed to be purified before they could be used.

1           21. Once manufactured, the gas would be pumped directly to residential and other  
2 users through pipes. Thus, as is the case with the MGPs at issue here, the plants were often  
3 situated in close vicinity to residential areas.

4           22. MGPs commonly (and here) consisted of several component  
5 operations/buildings, often colloquially referred to collectively as “gas-works,” spread across an  
6 area of several city blocks. The heart of an MGP was the “retort bench,” which would generally  
7 be housed in its own building known as the “retort house.” The retort bench was the  
8 construction in which the retorts were located. Retorts were where the coal and/or other fuel  
9 stock would be heated and the gas evolved. Depending on the sophistication of the retort, a  
10 greater or lesser amount of the fuel stock would be carbonized. Within the retort house on top of  
11 the retort benches were “hydraulic mains,” in which the gas evolved from the fuel stock, as well  
12 as coal tar and ammoniac liquor would collect through pipes that carried off the gas from the  
13 retorts. One of the principal purposes of the hydraulic mains was to draw off some of the large  
14 amounts of coal tar, with which gas from the retorts was laden.

15           23. Even with the drawing off of some coal tar by the hydraulic mains, the gas  
16 coming directly from the bench was a noxious soup of chemicals. Components of that soup that  
17 needed to be reduced in quantity before the gas was distributed included: coal tar, which could  
18 be sold; ammonia vapors, which could also be sold, naphthalene, and hydrogen sulfide. The  
19 main components of an MGP used to accomplish this reduction were the “purifier” and the  
20 “scrubber.”

21           24. Chief among the contaminants that operators sought to remove was hydrogen  
22 sulfide, which caused the gas to smell like rotten eggs. Thus, the principal purpose of purifiers  
23 was the reduction of this chemical from the gas. This was originally done through either a dry or  
24 wet lime process, each involving lime through which the gas was passed. The resulting waste  
25 from the wet lime process was a material commonly known as “blue billy,” which contains  
26 cyanides and is recognized as one of the first historical toxic wastes. Blue billy, along with other  
27 MGP wastes like coal tar, was often disposed of by depositing it into a nearby body of water,  
28 such a canal or bay. It was also frequently piled into heaps and buried onsite from which the

1 buried waste would then leach into nearby water bodies and fields in times of rain. The dry lime  
2 process created less toxic solid waste but significant amounts of noxious sulphuretted hydrogen  
3 gas that would billow from the purifying works. Finally, an iron ore process was used, which  
4 generated less toxic and noxious waste. Scrubbers were used principally to remove ammonia  
5 from the gas.

6 25. Once through the purifier and the scrubber, the gas would then be stored in what  
7 was referred to as “gas holders” made of brick, stone, concrete, steel, or wrought iron, until  
8 pumped to customers.

9 26. In addition, gas works often had various other facilities within their footprints,  
10 including: coal tar refineries, tanks, and vats, which were collectively used to collect, store,  
11 process through fractional distillation the coal tar byproduct created in the gas making process,  
12 recovering tar, benzole, creosote, phenol, and cresols for sale; a “lampblack separator” used to  
13 extract carbon black for sale from coke, the byproduct that would remain in the retort after  
14 evolution of the gas; boilers used to generate steam for the powering of MGP operations, often  
15 through the burning of coke; a generator house, in which electricity would be generated; and oil  
16 tanks.

17 27. From their inception, MGPs had the reputation for being dirty and polluting, both  
18 as to the smoke and the waste their operations created. The wastes produced by MGPs are  
19 persistent in nature, and often still contaminate the site of former MGPs, as well as areas where  
20 MGP waste was intentionally deposited and/or to which it has migrated. These wastes come in  
21 several forms including coal residue solids, coal tar, blue billy, and “ammoniac liquor.”  
22 Ammoniac liquor, coal tar that was not further refined and sold, and washes were often allowed  
23 to leach into the ground or dumped into waterways. These types MGP Wastes and others were  
24 also often buried on site, including in what were referred to as “wells” or “tar wells.” Coal  
25 residue solids and coal tar are of the most concern as they contain mixed long-chain aromatic  
26 and aliphatic hydrocarbons, a byproduct of coal carbonization, types of chemicals that are  
27 commonly referred to in the collective as polycyclic aromatic hydrocarbons or PAHs. Many of  
28 the PAHs associated with MGP Waste are known carcinogens and are identified as “toxic

pollutants” by the United States Environmental Protection Agency (“US/EPA”) under 40 C.F.R. § 401.15. PAHs, in general, are recognized as extremely hazardous compounds to human health and the environment. Not only are many known carcinogens, they are also lipophilic, meaning they can dissolve into fats, a characteristic that allows them to easily cross biological membranes and accumulate inside organisms. PAHs are also genotoxic, meaning that once accumulated in an organism they damage the genetic information within the organism’s cells, causing mutations.

28. Blue billy contains cyanides and lime.

29. The traditional pathways for contact between these wastes and humans and/or the environment include direct contact with contaminated soils, groundwater, and/or aboveground water and contact with toxic vapor off gassing from contaminated soils and/or groundwater. Groundwater is commonly a transport mechanism for the migration of toxic PAHs that partition from MGP Wastes. Such PAHs in groundwater, in turn, commonly off-gas, entering houses and other businesses as toxic vapor.

## **B. Overview of Historic MGPs in the Marina and Fisherman's Wharf**

30. PG&E operated three MGPs (“Subject MGPs”) in the Marina and Fisherman's Wharf neighborhoods of San Francisco during the early 20th century (“Subject MGP Sites”). These facilities processed into gas coal and, especially during the later period of their operation, other hydrocarbons, such as crude oil, often in combination with coal, which was then pumped through pipes to houses and businesses for cooking, heating and lighting.

### **1. North Beach MGP**

31. The North Beach MGP Site is comprised of at least four city blocks bounded by Marina Boulevard, Buchanan Street, North Point Street, Laguna Street, Bay Street, and Webster Street, designated by the City and County of San Francisco Office of the Assessor-Recorder as Blocks 0459, 0460A, 0445A, and 0463B. The site also includes a triangular area of vacant land and paved parking (Marina Green) situated northeast of Marina Boulevard. PG&E produced gas at the North Beach MGP near the area north of Bay and Buchanan Streets until at least April 1906, when it was damaged in the Great Earthquake. Following the earthquake, PG&E used the



1 gas holders at the site to store and distribute gas that was manufactured at the Beach St. MGP  
2 and piped to the gas holders at the North Beach MGP.

3 32. A schema prepared by agents of PG&E showing the footprint of the North Beach  
4 MGP, with certain of the facilities that made up its gasworks, laid over an area of the modern  
5 day Marina neighborhood is attached hereto as Exhibit A. The schema shows *inter alia* that the  
6 gasworks included a large retort house, a purifying house, scrubbers, tar wells, gas holders, deep  
7 wells, and crude petroleum tanks, including one near the CCSF owned marina in an inlet of San  
8 Francisco Bay ("Gashouse Cove"). The latter crude petroleum tank was built on an artificial  
9 earthen mole that extended into the Bay. Clarke's home is located roughly between the former  
10 locations of the scrubbers and the generator house. The tar wells were used by PG&E as means  
11 of disposing coal tar wastes underground in the vicinity of the water table.

12 33. A map from the years following the Great Earthquake of 1906 shows the  
13 partially damaged structures of the North Beach MGP. It further shows that facilities consistent  
14 with and in addition to those presented on Exhibit A. These include facilities titled "tar  
15 refinery," "tar tanks," and "tar vats." The refinery was located in the middle of present day  
16 Beach St. at a location immediately South of where the schema indicates a "tar well" was  
17 located. Other components were located North of this location, including the tar tanks. The map  
18 further shows a boiler located north of these tanks.

19 34. The map also shows that immediately West of MGP was a canal opening up to  
20 the Bay that extended South to the approximate location of present day North Point St. and  
21 West to the approximate location of present day Webster St. This can also be seen in the map  
22 below. The canal was filled in approximately 1912.

23 35. The piecemeal testing that has been thus far conducted by PG&E within the  
24 North Beach MGP Site and adjacent areas, including without limitation adjacent areas of San  
25 Francisco Bay tide and bottom lands, show very significant levels of MGP Waste  
26 contamination. This includes a large deposit of MGP Waste contamination that has been  
27 characterized as coal tar immediately onshore from Gas House Cove in the historical vicinity of  
28 a crude petroleum tank, from which contamination is entering the Bay. High levels of MGP

Waste contamination in the sediment of Gas House Cove, high levels of MGP Waste contamination in the soils in the historical vicinity of the scrubber and generator house, and high levels of soil and groundwater MGP Waste contamination in the historical vicinity of the gas holders. The latter is the only location that PG&E has tested groundwater for MGP Waste contamination in the vicinity of any of the Subject MGP Sites. As discussed herein, PG&E has vigorously resisted any other testing of groundwater despite the significant likelihood that, like the groundwater in the single small area tested, the groundwater throughout the vicinity of the Subject MGP Sites and in the vicinity of those sites is heavily contaminated as a result of contact with MGP Wastes.

## 2. Fillmore MGP

36. The Fillmore MGP Site is comprised of at least four city blocks bounded by Fillmore Street, Cervantes Street, Mallorca Way, Pierce Street and Toledo Way, designated by the City and County of San Francisco Office of the Assessor-Recorder as Blocks 0462A, 0463A, 0466A, and 0467A. PG&E owned and operated the Fillmore MGP near the area west of Fillmore and Bay Streets until at least April 1906, when it was damaged in the Great Earthquake. The Marina Middle School is located on part of this site.

37. A schema prepared by PG&E agents showing the footprint of the Fillmore MGP, with certain of the facilities that made up its gasworks, laid over an area of the modern day Marina neighborhood is attached hereto as Exhibit B. The schema shows *inter alia* that the gasworks included two purifying houses, a tar reservoir, gas holders, a generator, crude oil tanks, and a wharf. One of the gas holders was below the playground of Marin Middle School. The US Geological Survey map below indicates that these gas holders were damaged at some point, presumably in the Great Earthquake

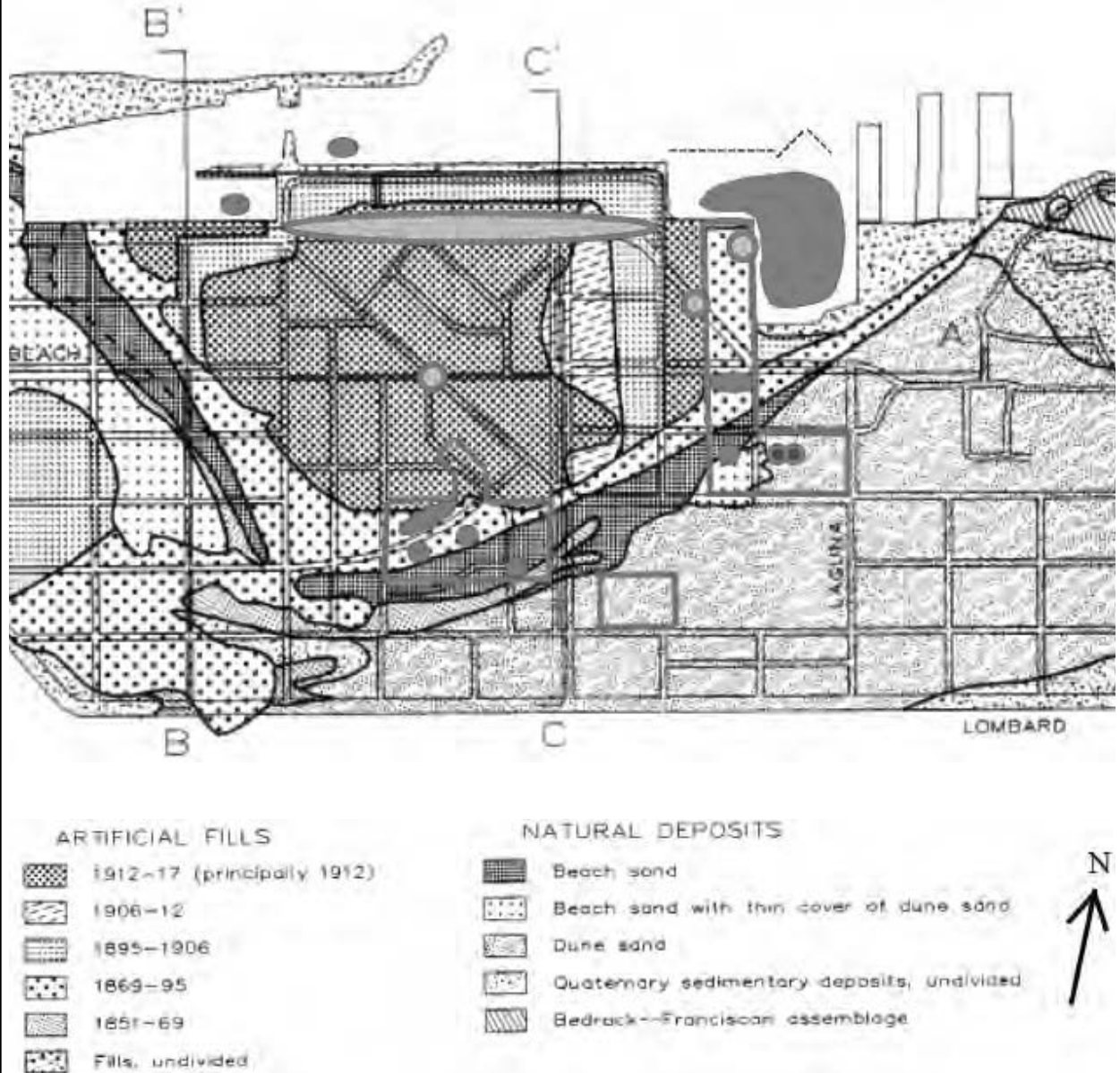
38. Though not explicitly represented on the schema, the gasworks of the Fillmore MGP included 72 retorts and seven generators for manufacturing gas by the Lowe process. The gas was stored in three gas holders; two holders located on the main Fillmore MGP premises and one gas holder located at what is now Marina Middle School. By 1892, the Fillmore MGP had expanded west one block to Pierce Street and was manufacturing both

1 coal and water gas. The layout of the Fillmore MGP is as follows. The two gas holders, each  
2 with a capacity of 335,000 cubic ft, stood along Francisco Street on the southern part of the  
3 Fillmore MGP. To the east and northeast of the gas holders stood two purifying houses, each  
4 with an attached oxide room. To the north of the western gas holder was the generator room,  
5 which housed the 72 coal retorts and several Lowe water gas generators. North of the  
6 generator room laid the coal and coke shed. West of the generator room stood the coal yard  
7 and two crude petroleum tanks. A wharf used to supply coal and other supplies was north of  
8 the generator house.

9 39. The existence of this wharf also highlights another characteristic of this MGP,  
10 and one that it shared with the North Beach MGP; it was on the immediate shoreline during the  
11 time of its operations. The above map also shows this. In the mid-1800s, a seawall, named  
12 Fair's Seawall, was constructed on the north edge of what is now Marina Green. Until  
13 approximately 1912, behind this seawall was an artificial bay in an area now diagonally  
14 bisected by Cervantes St., into which the Fillmore MGP's wharf jutted.

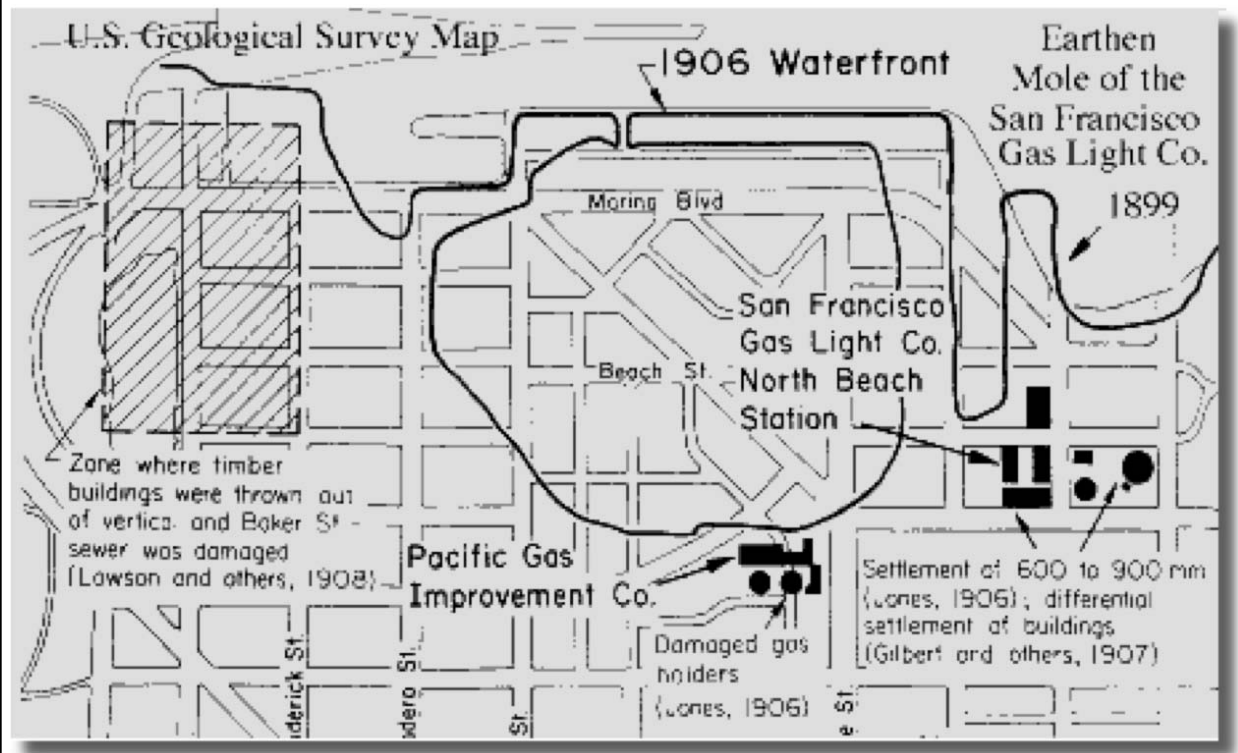
15 40. As result of the limited, piecemeal testing that PG&E has undertaken, significant  
16 soil contamination in the historical footprint of the MGP has been identified, as well as large  
17 coal tar deposits within what was the artificial bay.

18 41. Below is a historical map over which the results of PG&E's piecemeal testing  
19 and, in one case, work being conducted by CCSF, have found MGP contamination in the  
20 vicinity of the North Beach MGP and Fillmore MGP. The solid red shows soil or sediment test  
21 locations at which MGP contamination has been found. The red with brown fill shows locations  
22 at which coal tar has been found. The red with blue fill shows the only locations at which  
23 PG&E has tested groundwater in the Marina. As the map shows, the contamination is widely  
24 dispersed in the Marina neighborhood and testing by PG&E has been very limited.



42. The spatial relationship between the locations in red where MGP Waste contamination has been found and the location of the historical footprints of the Fillmore and North Beach MGP in blue show that there MGP Wastes are located both within and outside those historical footprints. Among the places outside the footprint at which MGP Wastes have been found in large concentrations are areas that are now, or were during the time of the MGPs' operations, inside the Bay. As the map below from approximately 10 years after the Great Earth Quake shows, both MGPs were on shore of the Bay when they were operating. The high levels

of MGP Waste contamination in locations off shore of these locations is consistent with disposal of MGP Waste in nearby waters that was typical of MGP disposal practices.



### 3. Beach Street MGP

43. The Beach Street MGP site is comprised of an area in the vicinity of Beach and Powell Streets in the Fisherman's Wharf neighborhood of San Francisco. PG&E owned and operated the MGP until at least the mid-1950s when the property was sold and redeveloped for commercial use. A hotel currently occupies portions of the site.

44. A schema prepared by PG&E agents showing the footprint of the Beach St. MGP, with certain of the facilities that made up its gasworks, laid over an area of the modern day Marina neighborhood is attached hereto as Exhibit C. The schema shows *inter alia* that the gasworks included numerous purifying tanks, scrubbers, exhaust rooms, three oil tanks, two gas holders, a generator, gas turbines, and a lamp black separator.

45. The Beach St. MGP operated as a coke and gas producing facility. Oil was used to heat the ovens and produce both coke and gas from oil. The plant evolved from producing mainly coke in the early years to manufacturing mostly gas by 1906. The



1 earthquake and fires of 1906 did not result in significant damage to the Beach Street MGP. A  
 2 1913 map shows the layout of the PG&E Beach Street MGP, with a 2,000,000 cubic foot ("cf")  
 3 gas holder and a 200,000 cf gas holder in the eastern portion of the site, several purifying tanks  
 4 in the center of the site, three oil tanks in the northwestern corner of the site, and lampblack  
 5 separators in the southwest. The Beach Street MGP operated until approximately 1931.

6 46. The Beach St. MGP was built on fill, and for a substantial portion of its  
 7 operations, abutted the shoreline of the Bay.

8 47. Testing in 1997 at a hotel across the street from Pier 39, in the historic location  
 9 of the Beach St. MGP, found exceptionally high PAHs in soil and severe contamination of  
 10 groundwater, attributable to PG&E's Beach Street MGP.

11 **IV. PG&E Handled, Stored, Treated, Transported and/or Disposed of Solid and/or**  
 12 **Hazardous MGP Wastes at the Subject MGP Sites and/or in the Vicinity thereof,**  
 13 **Including in the Present Location of the Clarke Home and the San Francisco Bay**

14 48. During the course of its operations of the Subject MGPs and/or upon its closure  
 15 of the Subject MGPs, PG&E handled, stored, treated, transported and/or disposed of solid  
 16 and/or hazardous MGP wastes at the Subject MGP Sites and/or the vicinity thereof, including in  
 17 the present location of the Clarke Home and the San Francisco Bay.

18 49. As discussed herein, the operation of an MGP, including the Subject MGPs,  
 19 centered on the separation of gas from coal and/or oil and then the purification of the gas.  
 20 During these processes, significant amounts of solid and hazardous toxic wastes were created,  
 21 handled, stored, transported and/or disposed of at various locations within the grounds of the  
 22 Subject MPG Site and/or in the vicinity thereof. These solid and hazardous wastes included  
 23 without limitation coal tar and blue billy.

24 **V. The Solid and/or Hazardous MGP Wastes Handled, Stored, Treated, Transported**  
 25 **by, and/or Disposed of by PG&E at the Subject MGP Sites and/or in the Vicinity**  
 26 **thereof Present, and/or May Present, an Imminent and Substantial Endangerment**  
 27 **to Health and/or the Environment**

28 50. PG&E's handling, storage, treatment, disposal and/or transportation of solid  
 and/or hazardous MGP wastes at the Subject MGP Sites and/or the vicinity thereof has resulted  
 in the contamination of the soil and groundwater of the terrestrial portions of those locations

1 and the tidal and submerged lands and marine waters of the bay portions of those locations. This  
2 contamination presents an imminent and substantial endangerment to health and/or the  
3 environment and/or may present an imminent and substantial endangerment to health and/or  
4 environment in the future.

5 51. The full extent of the contamination associated with the former MGP plants has  
6 not yet been defined. It is highly probable that additional significant levels of contamination  
7 exist in areas not yet evaluated at, and in the vicinity of, the Subject MGPs that would also pose  
8 an imminent and substantial endangerment to human health and the environment, and/or may  
9 present an imminent and substantial endangerment to health and/or environment in the future.

10 52. In locations where sampling has been conducted, contaminants associated with  
11 former MGP operations have been detected in soils and groundwater throughout the footprint of  
12 the former MGPs and within sediments in San Francisco Bay deposits adjacent to, and in the  
13 vicinity of, the Subject MGPs.

14 53. The concentrations of the MGP Waste contaminants detected to date are  
15 significant and pose an imminent and substantial endangerment to both human health and the  
16 environment, and/or may present an imminent and substantial endangerment to health and/or  
17 environment in the future.

18 54. In locations where groundwater testing has not been conducted, based on the  
19 distribution and concentrations of MGP Waste contaminants detected in soils, these same  
20 contaminants would be expected to be present in groundwater underlying and down gradient of  
21 the Subject MGPs, including groundwater that is in direct contact with the San Francisco Bay  
22 and that which is hydrologically connected with the San Francisco Bay, resulting in an  
23 imminent and substantial environmental endangerment, and/or may present an imminent and  
24 substantial endangerment to health and/or environment in the future.

25 **A. The Clarke Home Has Been Contaminated by PG&E's MGP Waste**

26 55. The Clarke Home is in the historic footprint of the North Beach MGP and is  
27 known to be contaminated with MGP Wastes. Specifically, the Clarke Home is a 0.08 acre  
28 parcel near the historic locations of the purifier, scrubber, and generator buildings of the



gasworks, as well as the coal bin and tramway used to transport coal between the coal bin and the retort house. Observations and testing demonstrate that in the course of PG&E's operation of the North Beach MGP, MGP Waste was disposed on the site, and the soil of the Clarke Home has been contaminated thereby at levels that present, and/or may present, an imminent and substantial endangerment to human health and/or the environment.

### 1. Observed "Black Rocks" in the Soil of the Clarke Home

56. Small and weathered "Black Rocks" are commonly observed on the surface in the Clarke Home's backyard and in shallow soil. They are all lightweight. Some are shiny and appear similar to raw, unprocessed coal, others are dull and crumbly, and some appear to be solids reformed from something once in the liquid state. Some of these rocks are the size of a baseball or bigger. There is historic evidence of a "coal bin" having been located in the vicinity of the Clarke Home during MGP operations.

57. In March 2010, two larger-than-usual Black Rocks found by Clarke while gardening were handed over to PG&E. PG&E tested the larger Black Rocks in April and informed Clarke in early May that they contained MGP Wastes. Test results from the 2010 Black Rocks indicated that their toxicity was very high.

58. Samples were taken from two different parts of one Black Rock and tested on two separate days by the same lab. The first tested for 16 PAHs priority compounds considered standard for investigating MPG residue. The aggregate of the 16 PAHs was 1,206 parts per million ("PPM"). The second test looked at the same 16 PAH priority compounds plus 41 'daughter' compounds for a more exhaustive analysis. The results of the second test showed that an aggregate of the 16 priority PAHs equaled 9,010 PPM and that the aggregate of all 57 PAHs was 11,555 PPM. The PAHs identified in the Black Rocks including the following that are identified by the California Environmental Protection Agency ("Cal/EPA") as carcinogens: benzene, ethylbenzene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-c d)pyrene, and naphthalene. Fluoranthene and naphthalene are identified as "toxic pollutants" by the US/EPA. See 40 C.F.R. § 401.15.

59. Another significant discovery of Black Rocks occurred in the summer of 2013, when an emergency sewer repair opened a small hole in the slab under the house. The hole revealed a large cache of the larger Black Rocks. The 2013 Black Rocks have not yet been tested but visually they are very similar to the Black Rocks discovered on the Clarke Home in 2010.

## 2. Soil Testing on the Clarke Home

60. In July 2013, PG&E took soil samples from the Clarke Home. The soil testing revealed significant MGP Waste contamination. It further showed that the contamination is widespread across the entire footprint of the Clarke Home.

61. Benzo(a)pyrene equivalent (“B(a)P-EQ”), which aggregates benzo(a)pyrene with certain percentages of six other identified carcinogens, is an established measure used to screen samples for the degree of contamination. The Department of Toxic Substance Control (“DTSC”), a part of the California State Environment Protection Agency, uses 0.9 PPM as the target for screening B(A)P-EQ.

62. All locations tested (18 of 18) had at least one value above this target screening level at some depth; and most of the samples (74 of 95) at any depth exceeded this target screening level. Furthermore, measured toxicity levels were higher than almost anywhere else in the Marina where test results have been made public.

63. PAHs found in significant quantities in the soil include: 1,2 benzphenanthracene (chrysene); acenaphthene; acenaphthylene; anthracene; benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; benzo(g,h,i)perylene; benzo(k)fluoranthene; bibenz(a,h)anthracene; fluoranthene; fluorene; indeno(1,2,3-cd)pyrene; naphthalene; phenanthrene; and pyrene. All but the last two are known carcinogens. Acenaphthene, fluoranthene and naphthalene are identified as “toxic pollutants” by the US/EPA. *See* 40 C.F.R. § 401.15.

64. The PAHs found in the soils on the Clarke Home present, and/or may present, an imminent and substantial endangerment to human health and/or the environment. The Cal/EPA uses human health screening levels that equate B(a)P-EQ to an incremental risk of cancer (“IRC”). According to this standard, a B(a)P-EQ of 0.038 PPM is equal to an IRC of 1 in

1,000,000 risk of cancer, and B(a)P-EQ of 3.8 PPM is equal to an IRC of 1 in 10,000 risk of cancer. B(a)P-EQ levels in soil on the Clarke Home were assayed as high as 1,149 PPM, a level exceeding one-hundred times the 1 in 10,000 IRC level, in other words, a level exceeding 1 in 100.

65. The breakdown of all 95 samples from the Clarke Home, relative to the 1 in 10,000 IRC level, is as follows: 4 exceeded it by one-hundred times, 21 exceeded it by ten times, 29 simply exceeded it, and 41 were less than it. Of the 41 that were less than, 20 were above DTSC's target screening level. The samples that equate to the high IRC levels were found widespread across the Clarke Home and also near the surface. Furthermore, there were indications of Black Rocks, which had previously been shown to have high PAH content, found at the surface and in shallow soil.

66. Boring logs (visual observations and odors) plus photographs indicate remnants of Black Rocks are present throughout the Clarke Home, corroborating widespread contamination. In every location sampled (18 of 18), the Clarke Home's soil contained material described in the results as: "clinker-like material (CLM)", "asphalt-like material (ALM)", "black nodules", "vitreous luster", "coal-like", "tar-like". The granularity of the suspect material varied from "fine to course gravel-sized." The density of the suspect material within the soil varied from "trace" to "70%." In several instances, the suspect material was described as accompanied by a "naphthalene-like odor." In addition, there was a noticeable occurrence of Black Rock fragments at those locations where chemical assays of soil samples showed toxicity at high levels. One sample noted as "70% CLM" in the boring log was determined by chemical assay to be highly toxic with a B(a)P-EQ of 1,149 PPM.

**3. PG&E Has Refused to Test Groundwater Saturated Soils, or Soils Below the Water Table Anywhere at the Clarke Home and Has Refused to Conduct Other Requested Soil and Vapor Testing at the Clarke Home**

67. PG&E has affirmatively refused to test groundwater, saturated soils, soils below the water table at the Clarke Home, taking the position that such testing is unnecessary on the grounds that the Clarks do not drink the groundwater and DTSC is not requiring PG&E to do

such testing. PG&E has further taken the position, concerning groundwater testing, generally, in connection with the Subject MGPs, that it is not subject to the groundwater testing and remediation requirements contained in San Francisco City Maher Ordinance, Article 22A of the San Francisco Health Code and Section 106A.3.2.4 of the San Francisco Building Inspection Code.

68. Also, as discussed elsewhere herein, the testing conducted by PG&E of the Clarke Home was inadequate in several other significant ways.

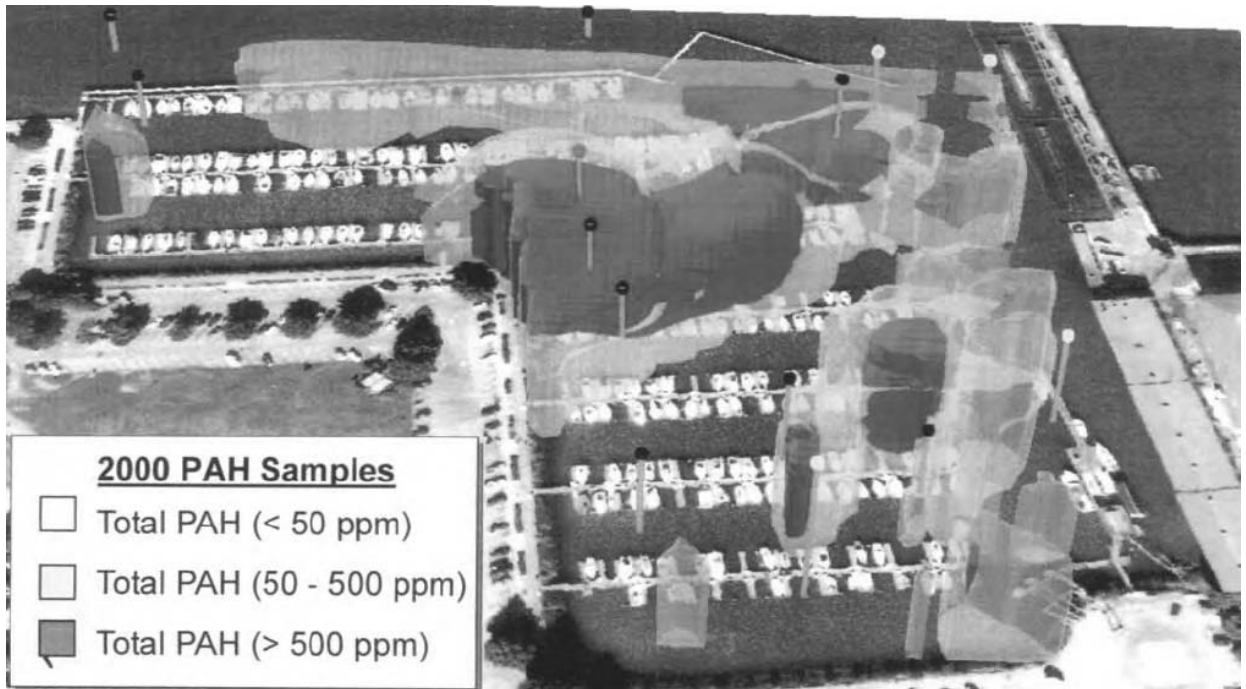
**B. Other Piecemeal Testing by PG&E and Independent Investigations Have Revealed Significant Contamination by MGP Wastes in other Areas of the Marina, Fisherman's Wharf, and Adjacent Bottom Lands of the Bay**

**1. Testing in the Vicinity of the North Beach MGP Site**

**a. Gashouse Cove**

69. Gashouse Cove is a small boat harbor in an inlet of San Francisco Bay under the jurisdiction of the CCSF that borders the North Beach MGP Site. The Western edge of Gashouse Cove is defined by the Eastern edge of what was the earthen mole built by PG&E as part of the North Beach MGP. Near the North end of the mole was located a crude petroleum oil tank and a wharf on the Northeast corner of the mole that was used by the gasworks. Since the operations of the North Beach MGP were ceased, a large portion of what was formerly the Eastern portion of Gashouse Cove was filled in to build portions of Fort Mason.

70. CCSF has conducted two decades of studies of contamination in the sediment, revealing that (1) the sediment in the tidal and submerged lands in the inlet is heavily contaminated with high PAH laden MGP Waste and (2) high PAH laden MGP Waste migrated into the inlet from upland sources. Another study is being initiated now as we begin the third decade from when MGP contamination was first confirmed in the sediments of Gashouse Cove. There is, as yet, no agreed upon plan for remediating the MGP Waste in Gashouse Cove or to prevent its recontamination from upland MGP Waste sources.



71. There has been no testing done of the level to which water in the inlet is contaminated, nor are there any plans to conduct such testing. There are also no plans to test for contamination in the water, tidelands or submerged lands in adjacent areas, such as areas along the Marina Green or under the piers of Fort Mason.

72. Between 1994 and 2000, CCSF conducted six studies to characterize sediments and determine disposal requirements for the material to be removed during anticipated dredging projects in Gashouse Cove. Each study found PAH contamination above the limit for disposal of the dredged material in water. The photo above was produced by CCSF to illustrate the distribution of PAH contamination in Gashouse Cove found in the year 2000 based on the limited testing conducted.

73. Another of the studies conducted in the last ten years examined the immediate shoreline looking for upland sources that might re-contaminate Gashouse Cove after dredging. Soil samples were taken from the CCSF-owned portion of the shoreline bordering Gashouse Cove. (The shoreline on federally owned Fort Mason, which also borders Gashouse Cove, was not included.) This study, from or around 2006, found a significant deposit of coal tar, which is believed to be seeping into the Bay. The seep is in an area near a plume of PAHs with the

highest degree of contamination that has been mapped in the Gashouse Cove sediment. The coal tar was found deeper than twenty feet at a location where the water table is believed to be less than seven feet. Groundwater was not tested in this study. The PAHs measured in the coal tar and the maximum measured in Gashouse Cove sediment are comparable with that of soil samples from the Clarke Home.

74. Anecdotal evidence, including video shot in 2012 by an amateur videographer of what appears to be a thick black hydrocarbon bubbling up to the surface in Gas House Cove, is also consistent with the existence of a very large coal-tar seep into the cove. The location of the bubbling substance is near where a coal-tar deposit has been found on the immediate onshore perimeter. While coal tar from MGPs is generally denser than water, depending on its precise mixture it can in some cases be less dense or neutrally buoyant. Furthermore, the density of coal tar can change over time.

**b. Marina Substation**

75. A PG&E owned 0.25 acre parcel within the 9.5 acre North Beach MGP Site, which PG&E currently uses as a substation ("Marina Substation"), was tested for MGP Wastes in 1991. The Marina Substation is in the vicinity of the offices of the North Beach MGP, which was located near the location of the gas holders. Soil and groundwater tests indicated that residues associated with the former MGP are present in on-site soils, especially saturated soils, and in groundwater underlying the site. The maximum total PAHs were 96.9 PPM in the unsaturated soil; 1,160 PPM in the saturated soil; and 3.51 mg/l in groundwater. Recommendations were made for investigation of the larger North Beach MGP Site because the source of PAHs in the groundwater and saturated soil was not believed to be *solely* from the smaller Marina Substation parcel – in other words, it was believed to have migrated there from elsewhere in the North Beach MGP site.

**c. Gaslight Building**

76. A privately owned 0.3 acre parcel within the 9.5 acre North Beach MGP Site, which previously functioned as headquarters of the gasworks ("Gaslight Building"), was tested for MGP Wastes in 1997. Like the Marina Substation, the Gaslight Building was located near



the location of the gas holders. Results of soil sampling indicated the presence of significant PAHs in shallow soil. The PAH levels exceeded the remediation goals for industrial sites. The contamination was attributed to a waste product of coal gasification found in abundance in shallow soils during testing of the Gaslight Building. The waste product was termed 'lampblack' in 1997 but is the same as, or very similar to, the Black Rocks found on the Clarke Home. Test results of groundwater samples taken from shallow soils at the Gaslight Building indicated the presence of PAHs at notable levels. The PAH contaminant found in greatest amounts in the shallow groundwater at the Gaslight Building was Naphthalene, which is the most water soluble, and water mobile, of the PAH compounds.

**d. Testing and Remediation of Other Residences as Part of PG&E's "Environmental Program"**

77. In 2010, PG&E embarked on what it called an "environmental project" or "EP" in the Marina. In addition to the Clarke Home, *every* residence located in the footprint of the North Beach MGP whose results from EP testing are known has required a major remediation. There have been six thus far, and all of the remediations have been accompanied by a requirement that the property owner enter into a land use covenant ("LUC"), legally restricting the future use of the property. This requirement indicates that these remediations have not resulted in the complete removal of MGP Wastes from the properties. Indeed, PG&E has affirmatively refused to even conduct testing of groundwater, saturated soils or soils below the water table at these properties.

78. The people who live in these residences have been required to relocate from their homes for extended periods of time, some for over a year, to allow the remediation to take place safely. The remediations have entailed digging contaminated waste from each back yard and garden, and from under the slab and foundations of many of the homes, and trucking it to a dumpsite suitable for toxic material. Sidewalks are closed off from corner to corner while these excavations are done by workers with protective gear. These activities cause significant inconvenience to neighbors, including Clarke.



79. There are no side yards or other access to the backyards and gardens of homes in the Marina so the contaminated waste must be transported through the residence. The ground floors of the residences have been demolished to allow construction equipment such as small bulldozers to enter and leave the yards. Impacts to structures from the excavations have not been publically disclosed but in some cases the upper floors of homes appear gutted and the windows boarded up. Remediation plans call for the restitution to a “like kind” condition; however, many owners have been very unhappy with the whole process, and its results.

## **2. Testing in the Vicinity of Fillmore MGP Site**

### **a. Marina Boulevard Sewer Boxes**

80. A study was conducted in 1977 by CCSF in preparation for construction of a combined sewer and storm water storage and transport system in the Marina neighborhood. Boring logs for nine of ten borings along Marina Blvd between Scott Street and Webster Street noted “creosote residue” often at more than one depth. The summary report for the study stated: “the area from Scott Street to Webster Street is . . . extensively contaminated with creosote residue, probably resulting from previous gas plant activities . . .” Marina Blvd from Scott to Webster forms the southern boundary of the Marina Green and cuts east to west across the semi-enclosed bay formed by Fair’s Seawall when the Fillmore MGP was operating. This suggests there is a large plume of MGP Waste coal tar contamination in the area as a result of the Fillmore MGP.

81. The 1977 study found the same “creosote residue” and “oil residue” together with “crude oil residue” in two other borings east of Webster Street. These locations are outside of Fair’s Seawall and associated with the North Beach MGP

### **b. Investigations in the Marina Following the Loma Prieta Earthquake**

82. A number of studies were conducted by the United State Geological Survey (“USGS”) in the Marina district after the 1989 Loma Prieta earthquake.

83. The boring log for an investigation at the five-point intersection of Beach St, Cervantes Blvd, and Mallorca Way noted a “creosote smell” in the 6’ to 26’ range. The location

is mid-way between the Fillmore MGP and Marina Blvd where extensive creosote was found in 1977. This location is also the center of the semi-enclosed bay formed by Fair's Seawall when the Fillmore MGP was operating. This finding corroborates the existence of a plume of MGP contamination in the former location of the semi-enclosed bay behind Fair's Seawall.

**c. Investigation of Sediment in the West Basin**

84. CCSF conducted testing of sediments in the San Francisco West Basin Marina in 2011 to support a major harbor renovation project. Similar to Gashouse Cove, earlier studies indicated contamination at some locations above the limit for disposal of dredged material in water. The 2011 investigation was intended to characterize sediments at a higher resolution to further delineate the extent of contamination within two areas previously characterized as "not suitable for unconfined aquatic disposal," or "NUAD." The new investigation confirmed that contamination, especially PAH contamination, in the NUAD areas exceeded the Essential Fish Habitat Bioaccumulation Triggers. These NUAD areas lie outside Fair's Seawall.

**d. Testing and Remediation of Other Residences as Part of EP**

85. There are ten residences located in the footprint of the Fillmore MGP whose test results are known. Seven of the ten have required a major remediation similar to that described for residents in the footprint of the North Beach MGP accompanied by an LUC; one has required an LUC without a remediation, and; two have required neither an LUC nor a remediation. Again, PG&E has affirmatively omitted to test groundwater, saturated soils, or soils below the water table. Thus, there is no basis on which to be confident that the two properties that did not require an LUC or remediation are uncontaminated with MGP Wastes.

**3. Testing in the Vicinity of the Beach St. MGP**

**a. Radisson Hotel Fisherman's Wharf**

86. In 1997, at the current location of the Radisson Hotel Fisherman's Wharf (which at the time was a Travel Lodge), 250 Beach Street, above the former Beach St. MGP groundwater and soil testing was done in connection with a proposed addition. Testing revealed exceptionally high PAHs in soil and severe contamination of several kinds in groundwater, attributable to the Beach Street MGP. More specifically, for example, Benzo(a)pyrene, a PAH,

was found in soil samples at concentrations up to 45,000 mg/kg. In the way of comparison: the Regional Screening Level for this compound is 0.015 mg/kg, and; the maximum equivalents concentration in the Northern California ambient PAH dataset is 2.8 mg/kg. Other PAHs in addition to benzo(a)pyrene were detected at elevated concentrations in the soil samples. The hotel sits roughly 200 feet from the bay and 800 feet from Pier 39.

**b. Pier 39 Sediment Testing**

87. Testing in 2012 found elevated levels of both high and low molecular weight PAH concentrations in sediments in the marinas adjacent to Pier 39. A photomap of Pier 39 with the sediment areas overlaid on it is attached hereto as Exhibit D. The areas labeled DU-1 in the east basin and DU-3 in the west basin had PAHs up to 15 times that of ambient concentrations in San Francisco bay. The cross-hatched areas indicate the zones that exceed the Essential Fish Habitat bioaccumulation trigger for PAHs. These areas were dredged in August 2012 and the top six inches of sediment retested in January 2013. Elevated levels of PAHs were again found indicating that contamination of the bay is ongoing. Both basins showed the new contamination with DU-3 in the west having the highest sample at a total PAH of 349 PPM. The blue rectangle on the photomap indicates the location of the Beach Street MGP relative to the Pier 39 sediment areas. 1997 testing at the Beach Street MGP found that just one of the PAHs found had a compound, B(a)P that measured 45,000 PPM in soil samples. To gauge the severity of this contamination, a B(a)P-EQ of 45,000 PPM would exceed the 1 in 10,000 incremental cancer risk by one-thousand times, in other words 1 in 10. Thus, if there were 10 people exposed to just this one of several contaminants for a sufficient period of time, statistically speaking 1 of them would develop cancer.

**C. MGP Waste Disposed by PG&E on and/or in the Vicinity of the Subject MGP Sites Has Contaminated the Sediment of Tidal and Submerged Lands in the Bay and Groundwater that Is Hydrologically Connected to the Bay**

88. As discussed elsewhere herein, even though the testing that has been done of tidal and submerged lands in the vicinity of the Subject MGP Sites has been severely limited and done on a piecemeal basis, where such testing has been done, it has revealed the existence of MGP Wastes with high levels of PAHs in the sediments of the tested areas. The origin of this

1 contamination is both through the direct disposal of MGP Waste into the water by PG&E during  
2 the operations of the Subject MGPs, including into Gashouse Cove, and through the ongoing  
3 migration of MGP Waste from terrestrial locations where the waste was disposed via  
4 groundwater flowing through the disposed wastes and/or other mechanisms.

5 89. All of the Subject MGP Sites sit, in whole or in substantial part, beyond the  
6 historical shoreline of the Bay on fill that has a very shallow groundwater table, located less  
7 than 10 or 15 feet below the surface. During their operations, facilities at the Subject MGPs  
8 were either abutting the shoreline or within a couple hundred feet of it. The Subject MGP Sites  
9 remain close to the shoreline and up gradient of ground water flows.

10 90. Where PG&E has conducted testing at depths of approximately 10 feet, it has  
11 found MGP Wastes containing high concentrations of PAHs, even though much of it was likely  
12 disposed over a hundred years ago. Given the prevalence of MGP Wastes in the limited number  
13 of areas within and around the Subject MGP Sites that PG&E has tested, it is highly probable  
14 that MPG Waste with similarly high levels of PAHs exist throughout the soils of areas in and  
15 around the Subject MGP Sites that have not yet been tested.

16 91. As groundwater flows through MGP Wastes, PAHs partition from the MGP  
17 Wastes and then are transported in the groundwater as it flows towards and ultimately into the  
18 Bay. This groundwater is hydrologically connected to the San Francisco Bay, flowing into the  
19 Bay, and conveying MGP Waste disposed by PG&E on the MGP Sites into the Bay. The  
20 Subject MGP Sites are all located in San Francisco's Northshore Groundwater Basin. The  
21 Northshore Groundwater Basin is open to the San Francisco Bay. Groundwater in the  
22 Northshore Groundwater Basin flows roughly to the Northwest into the Bay and is known to be  
23 subject to seawater intrusion. Thus, contamination in such groundwater contaminates the Bay.  
24 Once it reaches the Bay, a certain amount of the PAH contamination will remain in the water  
25 column, while the remainder will partition into the sediment, until it partitions back into the  
26 water column or something else, like a herring egg or larva.

27 92. PG&E has affirmatively omitted and vigorously resisted testing of the  
28 groundwater at the Clarke Home and at other locations in and around the Subject MGP Sites.

1 However, where PG&E and/or others have tested groundwater in such locations, the  
 2 groundwater has been shown to contain high levels of PAH contamination as a result of MGP  
 3 Waste. The tests have further suggested that PAHs are migrating to other locations via  
 4 contaminated groundwater.

5 **D. MGP Wastes Disposed by PG&E at and/or in the Vicinity of the Subject**  
 6 **MGP Sites Is also Conveyed into the San Francisco Bay Via CCSF's**  
 7 **Combined Sewer Wastewater System and Related Structures**

8 93. In the 1970s, CCSF constructed a combined sewer and stormwater collection  
 9 system, which was intended to transport all contents to wastewater treatment plants. As part of  
 10 this project, a network of combined transportation and storage ("T/S") boxes were constructed  
 11 that, with gaps in which tunnels exist, run roughly along the perimeter of San Francisco's Bay,  
 12 beginning at roughly the Western end of West Harbor, Northwest of Marina Green, and  
 13 continuing East before wrapping South and terminating at the water treatment plant in the  
 14 Dogpatch area. The T/S boxes are large structures, the tops of which are buried at depths from 8  
 15 feet and extend down approximately 20 feet. Below and to the sides of the T/S boxes is a drain  
 16 rock layer. This network of T/S boxes conveys MGP Wastes to the Bay in three ways.

17 94. Groundwater flowing Northwest through the MGP Wastes disposed of by PG&E  
 18 at locations at or in the vicinity of the Subject MGP Sites that are Southeast of the T/S box  
 19 network eventually encounter the T/S box network, given the shallow depth of groundwater in  
 20 the area. When the groundwater encounters a T/S box, some portion is driven under the box and  
 21 onward to the Bay, some portion enters the T/S box, and some portion is driven down gradient  
 22 along the edge of the T/S box until it reaches a gap in the network, at which point it resumes its  
 23 normal flow into the Bay.

24 95. The latter is one of the mechanisms by which the T/S box network conveys MGP  
 25 Wastes into the Bay. The T/S box network's Western terminus is at approximately the West end  
 26 of the West Harbor. Thus, groundwater containing MGP Wastes conveyed in this way enters the  
 27 Bay at that location. Not surprisingly, though the West Harbor is relatively distant from any  
 28 Subject MGP Site, sediment testing in tidal and/or submerged lands in the harbor has identified  
 high PAH MGP Wastes in those sediments.

96. The other two mechanisms are through the T/S box network itself. During large storm events the contents of the T/S boxes are conducted directly into the Bay through wastewater outfall pipes designed to prevent system overload. Large storm events, which transport water through the outfall pipes, on average occur 10 times a year. When this occurs the high PAH MGP Wastes in the groundwater that has entered the T/S box network are conveyed into the Bay.

97. Furthermore, during these large storm events when the ground becomes too saturated to absorb the rainwater, the stormwater enters the combined water collection system, carrying with it contaminants, including PAHs, that exist on the surface of the soils the waters cross. While only a small percentage of the locations with soils likely contaminated with MGP Wastes have been tested to date, it is likely that many have significant MPG Wastes at or near the surface. The Clarke Home is known to contain MGP Wastes with very high levels of PAHs in shallow soil and on the surface; it is reasonable to assume there are other properties with similar contamination. In these locations, during large storm events rainwater washes through the surface and shallow MGP Wastes and is transported into the combined sewer system carrying with it MGP contamination. It is precisely during these large storm events that the combined sewer system backs up and dumps its excess directly into the bay through the outfall pipes. In this way, a manmade mechanism conducts MGP contamination from residues disposed by PG&E directly into San Francisco Bay.

98. Finally, when the T/S box network is working correctly it still conveys MGP Wastes to the Bay. The PAHs that partition from the MGP Wastes into groundwater that enters the T/S box network are not removed by wastewater treatment processes before the water is discharged into the Bay.

**E. Herring Commonly Spawn in Near Shore Waters in Close Vicinity of the Subject MGP Sites, as well as the Location where CCSF's Water Treatment Plant Discharges Water into the Bay, and Fertilized Herring Eggs and Larval Herring Are Well Known to Suffer Mortal Effects from PAHs**

99. PAHs are known to have devastating effects to herring productivity and abundance, killing the fertilized eggs and larva that come in contact with them, including

1 through a process know as photo-enhanced toxicity, and leading to long-term weakening of  
2 swimming capacity of those fish that survive.

3 100. Every year, herring return to the San Francisco Bay to spawn. Like many  
4 anadromous fish, the herring that return to the Bay were born in the Bay. Furthermore, a herring  
5 born in the Bay will return to spawn in the Bay in as many as eight yearly seasons. Thus, a loss  
6 of fertilized herring eggs or larval herring can have significant negative population  
7 consequences almost indefinitely into the future.

8 101. Herring traditionally spawn—laying their eggs to be fertilized, develop, and  
9 hatch into larval herring—in the substrate along the San Francisco waterfront, including areas in  
10 the immediate vicinity of each of the Subject MGP Sites, as well as areas South and East along  
11 the waterfront as far as Hunter’s Point. Herring spawning East and South along the waterfront  
12 are also known to be washed, along with their fertilized eggs, out and around the waterfront to  
13 areas adjacent to the Subject MGP Sites where they often come to rest on the sediments of tidal  
14 and submerged lands there.

15 102. PAHs are very hazardous compounds and, owing to their lipophilicity—the  
16 ability to dissolve into fats—they can easily cross biological membranes and accumulate inside  
17 organisms, causing damage to the genetic material. PAHs are referred to as “genotoxic”—  
18 meaning they damage the genetic information within a cell causing mutations.

19 103. As to herring in particular, significant scientific research—much of it catalyzed  
20 by oil spills—has shown that when fertilized herring eggs and larval herring are exposed to  
21 PAHs, very significant levels of mortality occur both acutely and over-time. In other words,  
22 PAH exposure both kills off a large portion of exposed fertilized eggs and larva and weakens  
23 those fish that survive the initial insult, decreasing the long-term survival of the fish, which, in  
24 turn, decreases the period of ecological services that the fish can provide. A healthy herring can  
25 return to spawn in the San Francisco Bay every year for eight years or more. A fish killed at  
26 birth will return zero times to spawn; a fish that survives exposure but is weakened will likely  
27 return fewer times.



1           104. One of the mechanisms by PAHs negatively affect herring is through a process  
2 known as “phototoxicity” or “photo enhanced toxicity.” PAHs, due to their lipophilicity are  
3 uptaken into the cells of fertilized herring eggs and larval herring. Fertilized herring eggs and  
4 larval herring are translucent; thus, sunlight enters the cells of fertilized herring eggs and larval  
5 herring. When the cells of fertilized herring eggs and herring larvae into which PAHs have been  
6 uptaken are exposed to sunlight, a chemical reaction occurs, causing the oxygen molecules  
7 contained within such cells to reverse their orientation. Once reversed these oxygen molecules  
8 essentially burn the cells from the inside out, causing dramatic and generally mortal impacts to  
9 fertilized eggs and embryos. This effective “energization” of uptaken PAHs by sunlight means  
10 that even an uptake of a small quantity of conventionally measured PAHs, below that which  
11 would be expected to have lethal effects, causes lethal mortality in herring eggs and larva.

12           105. This and other mechanisms cause exposure to PAHs to be a virtual death  
13 sentence for most exposed fertilized herring eggs and larval herring, with stock-based effects  
14 felt for years after.

15           106. In addition, recent studies have indicated that other petroleum product  
16 components, in addition to PAHs, that are contained in, especially, low grade refined petroleum  
17 products like bunker fuel have lethal phototoxic effects on herring eggs and larva. Coal tar is  
18 recognized as one of the most toxic substances used to make bunker fuel, leading some  
19 regulatory authorities to ban the sale of bunker fuel containing it.

20           107. Thus, the MGP Waste contamination of the waters of the Bay and the sediment  
21 of the tidal and submerged lands thereof presents, and/or may present, an imminent and  
22 substantial endangerment to the environment of the Bay, including its herring population.  
23 Exposure of fertilized herring eggs and herring larva to the PAHs and other toxic chemicals in  
24 the MGP Wastes has caused, and is reasonably certain in the future to cause reductions in the  
25 productivity and abundance of the San Francisco Bay herring stock, with long-term  
26 consequences for the survival of a stock already threatened by factors such as the current  
27 drought.

1           **F.     Herring Are a Keystone Species Vtally Important to the Ecosystem of the**  
 2           **San Francisco Bay**

3           108.   Pacific herring (*Clupea pallasii*) are a keystone species in the pelagic food web.  
 4           This is due to their traditionally very high levels of productivity and interactions with a high  
 5           number of predators and prey. Thus, in addition to their importance as a commercial species,  
 6           they are an important source of food for many other species and serve as a bridge between  
 7           plankton and other small food sources and larger animals, including larger fish, mammals, and a  
 8           wide variety of bird species.

9           109.   Sub-adult and adult herring in schools are one of the major fodder animals of the  
 10          sea, providing food for salmon, sharks, lingcod, and other fish species, as well as for waterfowl,  
 11          sea lions, and whales. Herring eggs are a major source of food in the areas where they are laid  
 12          for various types of fish, including sturgeons, smelts, surfperches, and crabs, as well as for  
 13          birds, including California gulls, mew gulls, glaucous-winged gulls, western gulls, American  
 14          coots, and the and surf scoters.

15          110.   The San Francisco Bay is the main spawning and rearing habitat for the largest  
 16          coastal population of Pacific herring along the continental Untied States. The San Francisco Bay  
 17          herring fishery has been carefully managed for decades to ensure that a sufficient number of  
 18          fish are allowed to escape to both ensure the long-term viability of the stock and to ensure there  
 19          are sufficient herring and herring eggs available for predators. SFHA's members have actively  
 20          participated in this management, and in recent years have, in fact, voluntarily advocated for a  
 21          lower quotas of the total amount of fish they harvest from the Bay. In the wake of Cosco Busan  
 22          oil spill, members also chose to have a significant portion of the funds that they would have  
 23          received in compensation dedicated to projects supporting herring stock.

24          111.   As a result of this management, the San Francisco Bay herring stock has in  
 25          recent years bounced back from past lows. However, the overall productivity and abundance of  
 26          the stock is vulnerable to factors, including those related to decreased fresh water deliveries to  
 27          the Bay as a result of the ongoing drought and freshwater diversions.

112. The endangerment that the MGP Wastes presents, and/or may present in the future, to the San Francisco Bay herring stock, in turn, endangers, and/or may endanger in the future, the various other species that depend on the herring and the proper functioning of the pelagic food web as a whole.

**G. PG&E Has Affirmatively and Repeatedly Taken Advantage of Ineffective Local Regulation for More than Two Decades to Avoid Testing and Remediating MGP Wastes at or in the Vicinity of the Subject MGP Sites**

113. Since 1991, PG&E has effectively controlled state regulators so as to avoid its responsibility to do comprehensive testing for and remediation of MGP Wastes at the Subject MGP Sites and the vicinity thereof. The relative strengths of Cal/EPA and PG&E are such that adequate regulation has systematically been thwarted and is continuing to be bypassed. As just one example—though (a) San Francisco’s Maher Ordinance specifically requires groundwater testing and remediation in connection with any project that would involve the removal of a certain quantity of soil, (b) groundwater is known to be a common and critical means by which PAHs in MGP Wastes are transported across space and enter structures in the form of toxic vapors, and (c) PG&E has been specifically asked to test groundwater for contamination from MGP Wastes by the DTSC —PG&E has consistently refused, and continues to refuse, to even test groundwater at the Subject MGP Sites or in the vicinity thereof.

114. As a result, the testing and remediation of MGP Wastes at the Subject MGP Sites and/or in the vicinity thereof that PG&E has been required to do, and is likely to be required to do absent court intervention, is, and has been, fundamentally inadequate to address the endangerment to human health and/or the environment that the MGP Wastes present, and/or may present in the future.

**1. In 1991, PG&E Took Advantage of Divisive and Weak State Regulatory Agencies to Affirmatively Avoid Testing and Remediating MGP Wastes in Suspected Locations Around the Marina Substation**

115. In 1984, the US/EPA identified a number of former MGP sites across the country that could pose a threat to health or the environment. In 1986, PG&E and the US/EPA met and

1 discussed a plan for investigating and remediating MGP sites in PG&E's service area. PG&E's  
2 plan included coordination with the Cal/EPA.

3 116. US/EPA has a policy to transfer the administration of national programs to state  
4 and local governments to the fullest extent possible. Consistent with that policy, US/EPA  
5 deferred to Cal/EPA the responsibility for oversight of testing and remediation of the Subject  
6 MGP Sites. The US/EPA has not been involved since.

7 117. Subsequently, two branches of Cal/EPA became involved in these investigations:  
8 the DTSC and the Regional Water Quality Control Board ("RWQCB"). DTSC and RWQCB  
9 may have overlapping responsibilities, especially in locations that involve contaminated soil  
10 and/or contaminated groundwater near waterways.

11 118. PG&E took advantage of ineffective regulation by Cal/EPA when the Marina  
12 Substation, a very small part of the North Beach MGP, was tested in 1991.

13 119. DTSC was the lead agency for oversight and classified the project as a State  
14 Response or National Priority List ("NPL").

15 120. Testing of the Marina Substation revealed significant PAHs in soil and  
16 groundwater as noted previously herein.

17 121. The Preliminary Endangerment Assessment ("PEA") for the Marina Substation  
18 indicated that contamination existed beyond the small 0.25 acre area that was tested. The PEA  
19 noted that the Marina Substation was a part of the larger North Beach MGP, which spanned  
20 three city blocks. It also indicated that groundwater played a role in migration of contamination  
21 from one site to another. The PEA recommended further investigation over a larger geographic  
22 area.

23 122. RWQCB wrote an internal memorandum after reviewing the PEA in October  
24 1991 that expressed concern for the high PAHs found in both soil and groundwater.

25 123. There was distrust between the Cal/EPA branches at that time. RWQCB's memo  
26 stated: "should watch this case. I'm concerned that DTSC will sign off or not push  
27 [groundwater and environmental] risk issues. Also 'side' boundry [sic] definition could become  
28 an issue (RWQCB vs. DTSC)."

1           124. DTSC did attempt to ‘push’ the risk issues initially - but ultimately failed. The  
 2 Site Evaluation Tracking Sheet written by DTSC in December 1991 was unambiguous. It stated  
 3 *inter alia*: “chemicals of concern [PAHs] are present in soil and groundwater . . . Additional  
 4 investigations needed regarding sources and/or transport of chemicals in soil and groundwater .  
 5 . . . PEA high priority . . . Further investigation must include entire 9.5 acres [North Beach  
 6 MGP site] . . . Confirmed groundwater contamination at the site.” Then in June 1992, DTSC  
 7 wrote a strongly worded letter to PG&E stating that further action across the larger site was  
 8 necessary. The letter cited the significant levels of PAHs found in both soil and groundwater. It  
 9 said these were hazardous substances known to cause cancer. The letter emphasized the threat to  
 10 health and the environment. DTSC wanted PG&E to test both soil and groundwater across the  
 11 entire 9.5 acre site. The letter was a call to action.

12           125. PG&E ignored the request, and no remediation of the substation—let alone the  
 13 entire North Beach MGP Site, as DTSC requested—was done by PG&E for twenty years. When  
 14 PG&E returned after two decades to begin the EP, it decided to test soil only and avoid testing  
 15 groundwater.

16           126. And notwithstanding its strongly worded letter, DTSC did not pursue the matter.  
 17 This was despite the fact that DTSC had responsibility for oversight of an investigation that  
 18 started from a US/EPA initiative in the 1980s and that this investigation was a State Response  
 19 or NPL, as opposed to a voluntary action.

20           127. DTSC effectively closed its file on the Marina Substation in 1992. At some  
 21 point, DTSC changed the status of the project from active to “refer to RWQCB.” However,  
 22 there is no evidence that DTSC actually did anything to refer the Marina Substation  
 23 investigation to RWQCB. There is no evidence that DTSC referred or initiated an investigation  
 24 of the larger North Beach MGP with RWQCB either. Accordingly, RWQCB did not open a  
 25 project or take action of any kind. Indeed, except for the internal memorandum already  
 26 mentioned, RWQCB denies any involvement with this Marina Substation project.

27           128. These actions (and failures to act) by state regulatory agencies, in 1991, allowed  
 28 PG&E to affirmatively avoid testing and remediating toxic MGP Wastes in the North Beach

1 MGP Site that have been endangering the health and the environment for over twenty years. As  
 2 DTSC suspected then but did nothing about, it is now known that the larger area does in fact  
 3 contain significant contamination from MGP Waste in soil, groundwater, and bay sediments;  
 4 furthermore, extensive remediation has been necessary at almost every site tested in the North  
 5 Beach MGP Site to date.

6 **2. In 1997, PG&E Used Questionable Means to Skirt State Regulatory**  
 7 **Agencies and Affirmatively Avoid Testing and Remediating MGP**  
 8 **Wastes in Suspected Locations Around the Gaslight Building**

9 129. Adjacent to the Marina Substation and sharing a large border is a property  
 10 known as the Gaslight Building. The Gaslight Building is private property and ownership was  
 11 changing hands in 1997. An investigation was initiated because one of the lenders was  
 12 concerned about potential liability from contamination on the property.

13 130. As noted elsewhere herein, the 1997 testing of the Gaslight Building revealed  
 14 significant PAHs from MGP Wastes at the site. The report for that investigation is called a  
 15 Phase II Environmental Site Assessment (“P2ESA”). Not surprisingly, the P2ESA for the  
 16 Gaslight Building contained findings similar to the 1991 PEA for the Marina Substation:  
 17 significant PAHs; both soil and groundwater contamination; the suggestion that contamination  
 18 was migrating through groundwater. In addition, the P2ESA identified high levels of  
 19 Naphthalene in shallow groundwater. The 1997 results reinforced what was known in 1991 –  
 20 there was contamination throughout the larger North Beach MGP site, which borders on the San  
 21 Francisco Bay.

22 131. Despite these findings, PG&E, in an operation later called “scoop and run” by  
 23 one regulator, performed a minimal remediation at the Gaslight Building. A narrow landscaping  
 24 strip along one side of the property was excavated a few feet deep and the area replenished with  
 25 clean soil and new plants. PG&E’s justification for doing so little was: it is a commercial site  
 26 rather than residential; most of the site is covered by buildings, patios, etc.; gardeners might be  
 27 the only people coming into contact with contaminated soil. Groundwater and its ability to  
 28 transport known highly toxic PAHs from the site to other locations, including residences, were  
 ignored.



1           132. Oversight of the 1997 Gaslight Building investigation and remediation is  
2 dubious.

3           133. DTSC does not have the P2ESA or any other information about the 1997  
4 Gaslight Building project in its files. A responsible individual at DTSC denies any knowledge  
5 of the 1997 Gaslight Building investigation and remediation.

6           134. Plaintiffs received from PG&E a copy of the P2ESA along with a cover letter  
7 addressed to RWQCB. The letter asked for a review of the P2ESA relative to RWQCB  
8 standards. The letter also asked if RWQCB concurs with the proposed remediation. The letter  
9 had the proper address for a RWQCB office at the time. Presumably the letter was mailed but  
10 there was apparently no follow-up.

11           135. Nonetheless, RWQCB also does not have any information about the 1997  
12 Gaslight Building project in its files. And responsible individuals at the RWQCB, as well, said  
13 they had no prior knowledge of the cover letter or P2ESA, until those documents were brought  
14 to their attention in 2014. Similar to the Marina Substation in 1991, the RWQCB does not  
15 believe it had nor has oversight responsibility for the Gaslight Building investigation or  
16 remediation.

17           136. Indeed, there are questions whether the cover letter and the P2ESA was ever sent  
18 to RWQCB. The cover letter was addressed to a “Mr. Vic Powell” at the RWQCB. However,  
19 there was nobody by the name of Vic Powell employed by the RWQCB in 1997 or at any other  
20 time.

21           137. In connection with the 1997 Gaslight Building activity, PG&E once again  
22 actively ignored signs of contamination in the larger North Beach MGP area and thereby  
23 allowed the endangerment to health and the environment to persist for many years. There could  
24 be no question that PG&E by then knew that soil contamination, groundwater contamination,  
25 and the spreading of contamination via groundwater existed on a site that contained residences,  
26 schools, parks, etc. and bordered on San Francisco Bay. PG&E also again exhibited a careless  
27 attitude—at the very least—toward state regulators in order to further its agenda.

1                   **3.     Since 1977, PG&E Has Purposefully Ignored Indications of a Large**  
 2                   **Plume of MGP Waste from the Fillmore MGP and Failed to Report**  
 3                   **It to Regulatory Agencies or Initiate an Investigation of It**

4           138.   In 1977, test borings for a box sewer along Marina Boulevard found the area  
 5   between Scott and Webster extensively contaminated with what was characterized as a  
 6   “creosote” residue, but which would be described as “coal tar” now. The report said the  
 7   contamination probably resulted from previous MGP activities in the area. PG&E as the owner  
 8   operator of those MGPs would have been informed at that time.

9           139.   The creosote MGP Waste deposits along Marina Boulevard are located in what  
 10   was historically a semi-enclosed artificial bay confined by Fair’s Seawall when the North Beach  
 11   and Fillmore MGPs were in operation. The Fillmore MGP fronted onto this semi-enclosed bay  
 12   in the same way the North Beach MGP fronted onto Gashouse Cove. The sediments in  
 13   Gashouse Cove today are heavily contaminated with MGP Wastes. The area inland from Fair’s  
 14   Seawall was filled after the MGP ceased operations, in approximately 1912. That filling created  
 15   a sizable part of the Marina district. Today, the semi-enclosed bay and whatever contamination  
 16   it contains is covered over by the Marina Green and perhaps 50 acres of San Francisco  
 17   residential property.

18           140.   In 2010, PG&E was asked about their plans for investigation of the likely  
 19   contamination behind Fair’s Seawall. PG&E’s initial response was that the soil and soil-gas  
 20   investigation they initiated in 2010 would eventually include groundwater and that that testing  
 21   would define any impacts in the subject area. Later, PG&E settled into the position that no  
 22   investigation is needed because all the contamination is below the water table, i.e. in the  
 23   groundwater. PG&E maintains that contamination in the groundwater cannot harm humans  
 24   because no one comes in contact with it and no one drinks it. PG&E maintains that MGP  
 25   contamination that is capped and left in place cannot harm the environment because PAHs are  
 26   insoluble and immobile. Since their initial response in 2010, PG&E has been adamant about not  
 27   testing groundwater - anywhere. They have also been adamant about not testing soil or soil-gas  
 28   below the water table - anywhere.

141. The contamination in the semi-enclosed bay behind Fair's Seawall has never been characterized. Except for the extensive deposit of creosote found in 1977, no one knows how wide the contamination spread, how deep it is, or how potent it is. No one knows if PG&E's theory about this contamination being harmless to humans is correct because no one has investigated it. As for the environment, Fair's Seawall is part of the embankment, which separates the Marina from San Francisco Bay, and groundwater flows through the MGP Wastes en route to the Bay. Coal tar recently found along another part of the embankment is a known threat to the environment of Gashouse Cove and the health of those who use it. PG&E has affirmatively acted to avoid gaining similar knowledge concerning the extensive coal tar deposit and likely other MGP Wastes that exist in this area.

142. Indeed, despite the US/EPA's initiative in the 1980s to investigate MGP sites that might pose a threat to health or the environment, neither DTSC nor RWQCB have any information in their files about the 1977 creosote discovery or any projects to investigate the area. CCSF discovered the deposits in 1977 but did little more than record the findings in their report. The box sewer along Marina Boulevard got built and no department in CCSF, apparently saw the health and environmental endangerment caused by this contamination as part of their mission to address. That leaves PG&E as the sole decision maker, a fox guarding the henhouse.

**4. Since 1997, PG&E Has Taken Advantage and Is Continuing to Take Advantage of Weak Local Regulation to Avoid Testing and Remediation of a Highly Contaminated Site at the Beach Street MGP**

143. Testing at the Beach Street MGP in 1997 found exceptionally high PAHs in the soils. The testing also found a cocktail of harmful chemicals in groundwater. The site is now a tourist hotel occupying one city block in the Fisherman's Wharf area of San Francisco.

144. The 1997 investigation was done when an addition was built onto the hotel. CCSF's Department of Public Health ("DPH") provided oversight of the testing because its role in the permitting process is to protect the health of workers who might come into contact with contamination. The testing was done, the permits were issued, and the addition was built. DPH eventually certified the site based in large part upon a maintenance plan for a cap that is supposed to separate people from the contamination. No remediation was ever done.

145. Seventeen years later and despite PG&E's efforts to avoid doing so based on the DPH certification, testing at the Beach Street MGP is underway again, this time under the oversight of DTSC. DTSC, however, is limiting its investigation to determining whether there exist vapor intrusions into the hotel, endangering the hotels staff and guests. Despite the fact that DTSC's mission is also to protect the environment, there is no indication that the investigation is focused in any way on characterizing or reducing the environmental endangerment caused by the MGP Wastes at the Beach Street MGP Site or the vicinity thereof. RWQCB is aware of the site but plays no role.

146. The Beach Street MGP is a few hundred feet from San Francisco bay. The conditions at the site are analogous to the sites already discussed with high PAHs, soil contamination, groundwater contamination, proximity to the bay, perhaps only with greater severity. Yet no one is characterizing the MGP Waste contamination at the site or the extent it endangers the environment. The testing plan is solely for vapor testing, and excludes not just groundwater testing but also soil testing. Indeed, PAHs were found in shallow sediment at Pier 39, about 800 feet from the Beach Street MGP, in 2012 and 2013. Contamination in shallow sediment indicates ongoing rather than historical deposits, and thus is consistent with migration of PAHs from MGP Wastes at the Beach Street MGP through groundwater.

**5. Through the 1990s and 2000s, PG&E Took Advantage of a Weak Local Municipality and Weak State Regulators to Avoid Remediation of Known Contamination in Gashouse Cove and Upland Sources of Contamination**

147. As discussed elsewhere herein, Gashouse Cove is known to be highly contaminated with MGP Wastes from the North Beach MGP. The North Beach MGP borders on Gashouse Cove and a coal tar seep threatens to re-contaminate the cove, if its current contaminant laden sediment is ever cleaned-up. In 2012, a Gashouse Cove harbor tenant took videos and photographs of a thick black substance bubbling up during low tide. The black substance disburses on the water surface in a manner similar to oil. The location is near the suspected seep and not far from the historic location of a crude petroleum oil tank used in by the North Beach MGP operations.

148. Despite half-dozen or so studies over two decades, the MGP Waste contamination has not been remediated, for the simple reason that it'll be expensive. The volume and toxicity of sediments is such that disposing all dredged material in bay or ocean waters is not permitted and disposal in appropriate landfills is costly. In the meantime, Gashouse Cove is silting up to the point where it will no longer be usable as a boat harbor.

149. For CCSF, Gashouse Cove is income property where the income is being reduced. CCSF is not acting as a protector of the environment. Accordingly, CCSF has argued in favor of dredging only studies, measuring the volume of dredged material that can be approved for water disposal and the volume that must go into a costly landfill, rather than studies that included a component to determine sources of ongoing contamination that may endanger the health and/or the environment in the future; nor have the studies examined the extent to which the manner in which the dredging was done could result in harm to the environment.

150. Concerning Gashouse Cove, CCSF is acting as a property owner, not a regulator. CCSF has a financial incentive to dredge Gashouse Cove but little other apparent interest in the environment. RWQCB is the lead regulatory agency for Gashouse Cove, while DTSC is the lead agency for MGP sites. PG&E has navigated through these agencies to advance its own interests, which do not include locating, characterizing, and clarifying responsibility for contamination from MGP Wastes for which it is responsible.

**6. In 2013-2014, PG&E Initiated Investigations of Gashouse Cove with Carefully Circumscribed Locations in Order to Purposefully Avoid Testing and Remediation of MGP Contamination in Other Suspected Bay and Shoreline Locations**

151. In 2013, PG&E and CCSF met with the RWQCB to discuss the current state of Gashouse Cove and present plans to address contamination.

152. In 2014, RWQCB became the lead agency charged with securing the necessary permits for dredging Gashouse Cove. The work plan is still in development but it is known that previous testing did not meet RWQCB standards so additional testing will be performed before permits are issued. However, the additional testing is being designed only to further clarify the

1 volume of dredge material suitable for in water disposal and the volume-necessitating disposal  
2 in an appropriate landfill. Multiple agencies are involved in the permitting process and RWQCB  
3 coordinates amongst those agencies and with CCSF and PG&E.

4 153. Also in 2014, RWQCB became the lead agency for oversight of further testing  
5 along the perimeter of Gashouse Cove. This investigation is a follow up to the perimeter testing  
6 done in 2006, which discovered coal tar and other indications of MGP Waste along the  
7 immediate shoreline. These constituents are contaminating and threaten to re-contaminate  
8 Gashouse Cove after dredging.

9 154. These two projects are very nearsighted in terms of geography. Contamination  
10 does not respect political boundaries and there are suspect locations nearby. The dredging  
11 investigation is only testing inside Gashouse Cove because that is what is needed to facilitate  
12 permitting. Locations outside and on both sides of Gashouse Cove are not being tested and  
13 those locations have never been adequately tested for MGP Wastes. Given the history of this  
14 area, the sediment under Fort Mason piers to the east of Gashouse Cove is very likely  
15 contaminated as well. The same is true of sediment along the Marina Green to the west of  
16 Gashouse Cove.

17 155. The perimeter testing is also improperly limited. It only looks at the South and  
18 Western edges of the cove. It ignores the Eastern perimeter that is part of lower Fort Mason.  
19 Historically, at the time the MGPs were operating and for a few years after, Lower Fort Mason  
20 was a part of Gashouse Cove and was filled by the Army Corps of Engineers seven years after  
21 the earthquake, when there was ample MGP Waste in the area.

22 156. It also ignores the canal between the MGP's mole and Fair's Seawall, which was  
23 filled with earthquake debris, much of it from the ruined North Beach MGP, including MGP  
24 Wastes. It also ignores the entire shoreline along Marina Green. As discussed elsewhere herein,  
25 behind the Marina Green embankment, a large plume of MGP Waste from the Fillmore MGP  
26 has been discovered that has likely migrated into the Bay.

27 157. The prime mover for all this is PG&E; they define what projects get done and  
28 what projects don't. The state regulators are only reacting to the projects brought to them; they



do not initiate projects without a mandate. This time is like all the others back to 1991 at least – PG&E is using ineffective regulation to avoid testing and remediating MGP Wastes that may harm health or the environment.

**7. In 2010, PG&E Began a Project to Investigate MGP Wastes on Marina Private Properties Carefully Designed to Avoid Discovery of the True Extent of the Danger Posed by the MGP Wastes**

158. In 2010, PG&E embarked on what it called an environmental project (“EP”) in the Marina. The EP consists of testing and remediating private properties where the owner agrees to these actions. PG&E has targeted properties with back yards and gardens, but studiously avoided testing under houses or apartment buildings and will not test groundwater, saturated soils, or soils below the water table.

159. DTSC is the lead agency providing oversight. DTSC and PG&E have executed a Voluntary Cleanup Agreement (“VCA”) for this project. The VCA includes a funding mechanism by which PG&E reimburses DTSC for costs and a termination for convenience clause, such that the agreement is not binding on either PG&E or DTSC. PG&E, in turn, has secured an arrangement with the California Public Utilities Commission (“CPUC”) that allows PG&E to pass along 90% of its costs for activities done under the VCA to the rate-paying public, without the need for a review.

160. The voluntary aspect of the EP means that it is fundamentally different from the State Response or NPL investigation of the Marina Substation in 1991. In that older project, the regulator was nominally in charge and the polluter was required to respond. In the newer project, the polluter is voluntarily taking action and the regulator has been engaged, or hired, by the polluter who pays the regulators costs, to perform a specific function: give the polluter cover.

161. More specifically, the stated role of DTSC within the EP is to evaluate tests PG&E performs, evaluate remediation plans PG&E makes, and evaluate remediations PG&E executes. DTSC has regulatory authority and the ability to act but does so only in exceptional circumstances. PG&E runs the show. Indeed, PG&E’s outside counsel have been heavily

involved in crafting the LUCs, LUCs which PG&E represents to homeowners that DTSC requires homeowners enter concerning their properties.

162. DTSC's mission is to protect health and the environment. Significantly however, DTSC is not evaluating any action or lack of action by PG&E relative to standards DTSC believes appropriate to protect the environment. There is no objective in the EP to find contamination related to MGP Wastes that might impact the environment.

163. Among its shortcomings, PG&E is affirmatively not testing groundwater in the EP. Except in rare cases, PG&E is also affirmatively not testing soil below the water table in the EP. PG&E is purposefully avoiding collecting information to evaluate the threat to the environment and health presented by groundwater contamination caused by MGP Wastes. This is despite the fact that groundwater is a critical conduit for the movement of PAHs in MGP Wastes not only into the waters of San Francisco Bay but also into the houses of those that live above the groundwater in the form of the toxic vapor traveling through pathways such as those created by utilities.

164. PG&E also pointedly does not test under patios and slabs except in those instances where the property owner insists. The objective of the remediation portion of the EP is not to remove contamination by MGP Wastes. When MGP Waste contamination is found in soils under slabs and patios, those soils are excluded from remediation. When contaminated soils are found in gardens deeper than four feet below ground, those soils are also excluded from remediation. No consideration is given to the endangerment of leaving such contamination presents, and/or may present, to the environment.

#### **H. PG&E's Testing for, and Remediation of MGP Wastes, Planned and Completed, Is Inadequate**

##### **1. PG&E is Affirmatively Omitting Testing (Let Alone Remediating) Groundwater, Saturated Soils, and Soils Below the Water Table at all Locations at, or in the Vicinity of, the Subject MGP Sites**

165. As discussed elsewhere herein, PG&E refuses to test groundwater in the EP. Plans to test about two dozen properties across the Subject MGP Sites have been made. None

1 include groundwater testing. PG&E initially told Plaintiff Clarke that it expected groundwater  
2 testing eventually would be included in the EP but then indicated that it would not.

3 166. PG&E returned to test the Marina Substation in 2011. The site had been tested in  
4 1991 and high levels of PAHs were found both in saturated soil and in groundwater. PG&E  
5 retested the soils in 2011 but did not test groundwater. The results again indicated significant  
6 levels of PAHs in the soils. A remediation is currently planned for soil contamination. There is  
7 no new information concerning groundwater contamination and no remediation planned for the  
8 groundwater contamination previously found at the site.

9 167. As also discussed elsewhere herein, PG&E is studiously not testing soil below  
10 the water table except in rare cases. The few times that PG&E has tested below the water table it  
11 was either early in the process or a mistake.

12 168. For example, PG&E tested soil below the slab of one residence in the Fillmore  
13 MGP and found significant PAHs in almost all locations, some moist, near but above the water  
14 table. One data point was taken below the water table, likely unintentionally. It too found  
15 significant PAHs in the saturated soils. Nothing was done about any of these findings.

16 169. By failing to test groundwater, PG&E has ensured that MGP Wastes at, or in the  
17 vicinity of, the Subject MGP Sites will continue to present an imminent and substantial  
18 endangerment to human health and the environment, even if locations are "remediated." As  
19 discussed elsewhere herein, groundwater is known to be a common mode by which toxic,  
20 cancer-causing PAHs are transported from the location where MGP Wastes are deposited to  
21 other locations. Toxic PAHs, however, once suspended in groundwater do not always remain in  
22 the groundwater, but are known to partition out in a gaseous or vapor form, which, via a conduit  
23 like a houses utilities, can then enter a structure and affect the inhabitants thereof. Those PAHs  
24 that remain in the groundwater also get deposited in the San Francisco Bay, damaging the  
25 environment thereof. Given the levels of toxicity and extent of dispersal of MGP Wastes  
26 identified in the soils of locations in the limited number of locations that have been tested, it is  
27 virtually certain that any groundwater that comes in contact with the soils at, or in the vicinity  
28 of, the Subject MGP Sites becomes contaminated with such PAHs. By refusing to test

1 groundwater, PG&E has affirmatively hid from the public and regulators the full geographic  
2 extent of the area contaminated by its MGP Wastes. This is intentional.

3 170. Another of PG&E's apparent goals in not testing groundwater is limiting the  
4 public's knowledge concerning the extent of coal tar contamination at, and in the vicinity of, the  
5 Subject MGP Sites. Coal tar is in a class of compounds called dense non-aqueous phase liquids  
6 ("DNAPL"). DNAPLs, like coal tar, are known for their sinking characteristic. Forces and  
7 counter forces, gravity, hydraulic pressure, etc., continue migrating DNAPL until an  
8 equilibrium is reached; then the DNAPL's location may be relatively stable for a long period.  
9 Coal tar is heavier than water and thus often sinks below the water table before equilibrium is  
10 reached. If unremediated, deposits of coal tar thus become large banks of contamination from  
11 which PAHs are released, and will continue to be released, for many more decades into the  
12 future, generally into groundwater, which then transports it elsewhere. Indeed, groundwater in  
13 the vicinity of coal tar deposits almost always contains high PAHs. Thus, contaminated  
14 groundwater is often the first sign investigators have of the existence of a coal tar deposit,  
15 which, given its sinking characteristics, is frequently located a significant distance from the  
16 surface.

17 171. By failing to test groundwater, PG&E has thus denied the public and regulators  
18 one of the principal means by which the existence of deposits of coal tar MGP Waste—  
19 recognized as the most dangerous type of MGP Waste for human health and the environment—  
20 is commonly determined. This is intentional.

21 172. Another (perhaps obvious) corollary of PG&E's failure to test groundwater is  
22 that PG&E has not conducted, and has no plans to conduct, any remediation of groundwater or  
23 soils below the water table at, or in the vicinity of, the Subject MGP Sites. This virtually  
24 guarantees that, if PG&E is not compelled to conduct such testing and remediation large  
25 deposits of MGP Wastes will remain in place at the Subject MGP Sites, continuously releasing  
26 highly toxic PAHs into the groundwater and other parts of the environment for more decades to  
27 come.

2. **PG&E Has Made No Effort to Test, Monitor, or Remediate: Submerged or Tidal Lands in the Vicinity of its Historical MGP Sites; the Extent to which Waters of the San Francisco Bay Have Been Contaminated as a Result of MGP Waste; or the Effect that Such Contamination and in the Soils below Affects the Environment**

173. PG&E investigated and remediated dozens of MGPs in its service area since the 1980s. The three Subject MGP Sites along the north shore of San Francisco were left till last because they pose difficulties including multiple property owners and potentially high costs.

174. Soils under streams, rivers, and bays near former MGPs are commonly often contaminated. The Subject MGP Sites are very near San Francisco Bay: the North Beach MGP borders on the bay: the Beach Street MGP is 200 feet from the Bay: and the Fillmore MGP historically bordered on the Bay and the coal tar plume from the Fillmore MGP borders on the Bay today.

175. As described elsewhere herein, PG&E had multiple indications of contamination in and around the Subject MGP Sites; and PG&E has and is affirmatively avoiding testing groundwater and saturated soils in the EP.

176. This is despite the fact that PG&E has effectively admitted that MGP Waste contamination is reaching the Bay via groundwater, when it erroneously claimed that it need not test groundwater while investigating the perimeter of Gashouse Cove because of “the high rate of dilution associated with the tidal environment.”

177. It is not possible that PG&E is unaware of the endangerment to the Bay environment presented by the Subject MGP Sites. However, it has recklessly and callously resisted any attempt to even investigate the extent of that endangerment.

3. **As Part of the EP, PG&E Consistently Chooses Not to Test for, or Remediate Contamination from MGP Wastes**

178. As discussed elsewhere herein, the objective of remediation in the EP is not to remove MGP Waste contamination. In addition to intentionally “unknown” MGP Waste contamination in ground water and soils below the groundwater, PG&E leaves known MGP Waste contamination in place in virtually every remediation conducted as part of EP.

1           179. PG&E consistently leaves in place MGP Waste contamination found under a  
2 slab or patio. PG&E consistently leaves in place MGP Waste contamination found deeper than  
3 four feet. PG&E consistently leaves in place MGP Waste contamination found near any  
4 structure. In several remediations, instead of removing MGP Waste contaminated soils, PG&E  
5 has extended a patio to cover the area. In at least two remediations, PG&E simply imported soil  
6 to cover MGP Waste contamination found at three feet below the surfaces; a foot of soil was  
7 added on top of the existing yard so the offending MGP Waste contamination became, almost  
8 like magic, four feet below the new surface.

9           180. PG&E's justification for leaving contamination in place, in all or most instances,  
10 is premised on the existence, or creation, of a barrier between the MGP Wastes and humans,  
11 physical and/or legal. However, these barriers have much more to do with protecting PG&E  
12 from liability than protecting human health, and they do nothing to protect the environment.

13           181. As part of a remediation, PG&E generally puts in place physical barriers such as  
14 cement or soil or, as in the case with many houses and other structures, uses the existence of a  
15 physical barrier, like a slab, already in place as a justification to omit even testing under the  
16 structure. From a human health perspective this is shortsighted and myopic. While a physical  
17 barrier will, as long as it is in place, prevent direct contact between humans and solid and/or  
18 liquid MGP Wastes, there are significant limits to effectiveness to protect contact between  
19 humans and MGP Wastes in gaseous or vapor form, which is known to be highly toxic to  
20 humans and has been linked to cancer and premature births. First, in the event that the barrier is  
21 compromised by, for example, the need to conduct plumbing work under the slab, soil  
22 subsidence, etc., the barrier will no longer block toxic vapor. Furthermore, in such events, there  
23 is a likelihood that vapors would have concentrated behind the barrier in the period preceding  
24 compromise of the barrier; thus, when the barrier is compromised, there is a likelihood that a  
25 blast of concentrated toxic vapor would be delivered to the structure's occupants. Second, even  
26 if the barrier is uncompromised, it is extremely unlikely that the barrier would result in a  
27 hermetic seal; rather, the barrier would be broken in locations, allowing toxic vapor to enter.



182. In addition to these physical barriers, almost every EP remediation requires that the property owner agree to a legal barrier in the form of an LUC. The LUC is a deed restriction that proscribes activity in and concerning locations where the MGP Wastes is known or suspected to remain, e.g. under slabs that have not been tested. Recording an LUC places a liability on all present and future owners. While PG&E claims the LUCs are protective of human health, their true purpose is to protect PG&E from future liability: in the event that someone comes in contact with MGP Waste contamination that PG&E has left in place, PG&E can seek to invoke the LUC as shield behind which to hide from the liability of the consequences of such contact.

183. Neither physical nor legal barriers are protective of the environment. MGP Waste contamination left in place is a threat to the environment. Contamination migrates without respecting legal boundaries. Migration of MGP Waste contamination is often caused or assisted by groundwater, which flows shallowly through all of the Subject MGP Sites to the San Francisco Bay, living close by. The North Beach MGP borders on the Bay. The suspected plume from Fillmore MGP borders on the bay. The Beach Street MGP is within 200 feet of the bay. PG&E's deliberate and conscious strategy to leave known MGP Waste contamination in place exhibits a callous disregard for the health of the environment.

#### 4. PG&E's Testing of the Clarke Home Is Incomplete and Insufficient to Plan Remediation

184. As discussed elsewhere herein, the Clarke Home was tested in 2013 by PG&E. High levels of MGP Waste contamination were found, with PAHs greatly exceeding human health screening levels widespread across the Clarke Home and at all depths tested. However, PG&E's testing intentionally left important data gaps. The 2013 testing did not include: groundwater testing, testing saturated soils, or testing soils beneath the water table; vapor testing under the slab except at a few limited locations; soil testing under the slab except at too few locations at very shallow depth; soil testing under the footings of the home; soil testing anywhere between five feet and ten feet below the surface, nor at any depth deeper than ten feet; indoor air tests; or characterization of MGP Wastes other than chemical analysis.

185. The failure in 2013 to test soil under the slab at greater depths was in contravention of the Access Agreement between PG&E and Clarke. The other data gaps are the result of PG&E's general policies to intentionally omit testing for MGP Waste contamination of which PG&E does not desire there be knowledge, as well as PG&E's refusal to investigate further suspected MGP Waste contamination at Clarke Home of which the first round of testing strongly suggesting the existence. These omissions were intentional and were done with the goal of justifying a remediation which full information would likely have made untenable.

5. **PG&E's Proposed Remediation Plan for the Clarke Home Is Based on Incomplete and Insufficient Testing and Would be Inadequate to Prevent Endangerment to Human Health or the Environment**

186. PG&E provided a proposed remediation plan for the Clarke Home in June 2014 based on the incomplete and insufficient testing described above. Unlike virtually all EP documents that report contamination levels on a property, the proposed remediation plan for the Clarke Home does not contain the following sentence: "Based on the evaluation of the sampling results, existing soil conditions at the Property do not raise health risk concerns related to MGP contaminants for residents at the Property or any surrounding populations." This sentence is boilerplate and typically is repeated several times throughout such a document. Its omission from the proposed remediation plan for the Clarke Home indicates an acknowledgment by PG&E that, even based on the inadequate testing conducted, it is clear that the Clarke Home has been heavily contaminated by MGP Waste to an extent that indicates a substantial and imminent threat to human health and the environment. However, PG&E's proposed remediation would not adequately address the threat to either for reasons including without limitation the following.

187. First and fundamentally, the proposed remediation is premised on, and seeks to mitigate (some but not all) of the MGP Waste contamination identified through the testing described above. However, as discussed, that testing was fundamentally inadequate, leaving large holes in the data concerning likely potential locations and types of MGP Waste contamination at the Clarke Home. For example, given the extensive contamination in unsaturated soils on the Clarke Home, it is highly likely groundwater and saturated soils are

1 contaminated as well. The proposed remediation plan contains no provisions to address  
2 groundwater, saturated soils, or below water table soils on the Clarke Home

3 188. Although incomplete and insufficient, test results for the Clarke Home reveal  
4 unique and severe contamination vis-à-vis all other known properties tested in the EP. Surface  
5 level contamination found at the Clarke Home far exceeds most contamination found at any  
6 depth on all other properties tested in the EP. The Clarke Home also has MGP Waste  
7 contamination with toxic PAHs at levels that present much higher incremental cancer risks than  
8 that found at other properties. For example, the B(a)P-EQ value of a 2013 surface level soil  
9 sample found on the surface of Clarke Home is 1,149 PPM, and the value of a Black Rock  
10 found in the garden of the Clarke Home in 2010 is 1,002 PPM. The highest value anywhere in  
11 the EP is 1,329 PPM found at a depth of six feet at a property on Beach Street. The value for the  
12 coal tar found at a depth of 24 feet on the perimeter of Gashouse Cove is 1,136 PPM. All four  
13 B(a)P-EQ values are comparable. All exceed ***by one hundred times*** the 1 in 10,000 incremental  
14 increased cancer risk level used by DTSC.

15 189. Nonetheless, PG&E has proposed a remediation of the Clarke Home that would,  
16 without question leave substantial levels of MGP Waste contamination in place and would do  
17 nothing to prevent the Clarke Home's recontamination by MGP Waste migrating from other  
18 locations into the Clarke Home via ground water or another mechanism. The toxic MGP Waste  
19 contamination that would be left in place includes without limitation.

- 20 ☐ Contaminated soil from under the slab that is at a depth greater than 12 inches;
- 21 ☐ Contaminated soil from under the footings of the home;
- 22 ☐ Contaminated soil from within 3 feet of any structure, *or more* if PG&E determines that  
23 a greater distance is needed to protect "building foundations and adjacent properties";
- 24 ☐ Contaminated soil deeper than 5 feet, *or less* if PG&E determines removing to 5 feet is  
25 not "feasible" or if other "contingency plans . . . [are] necessary";
- 26 ☐ Contaminated soil from under public access areas where owner is responsible for utility  
27 hook-ups; and
- 28 ☐ Contaminated groundwater, saturated soils, and soils below the water table.

1 190. Instead of removing these contaminants, PG&E's proposed remediation plan  
 2 calls for what it terms "Institutional Controls," another way to say "land use covenant," which  
 3 would place the burden of inhibiting access and exposure to the MGP Wastes left in place at the  
 4 Clarke Home onto Clarke and all future owners of the property.

5 191. Finally, the inadequacies of PG&E's proposed remediation of the Clarke Home,  
 6 and the untrustworthiness of PG&E's assurances to the contrary, are corroborated by the history  
 7 of PG&E-conducted remediations in connection with the Subject MGPs. For example,  
 8 approximately 25 years ago, PG&E tested soils at approximately 15 private properties in the  
 9 vicinities of the North Beach MGP and Fillmore MGP, including some of the same homes being  
 10 evaluated in the EP today. PG&E informed the owners that the tests showed very low PAH  
 11 levels but, "as a courtesy," sent men around with rakes to "clean up" yards. However, it now is  
 12 clear that many, if not all, of these properties are highly contaminated with MGP Wastes; and  
 13 every property that has been retested has required remediation, including an LUC, with some  
 14 homeowners moving out of their homes for over a year.

15 **I. PG&E's Has Misled, and/or Affirmatively Concealed, the Full Extent of the**  
 16 **Toxic Contamination Caused by Their Disposal of MGP Waste in the**  
 17 **Marina and Fisherman's Wharf**

18 **1. PG&E Deliberately Omitted and/or Grossly Understated What It**  
 19 **Knew or Should Have Known About MGP Waste Contamination in**  
 20 **the Area**

21 192. PG&E had broad general knowledge concerning MGP Waste contamination  
 22 before rolling out its EP in 2010, including without limitation knowledge concerning:

- 23 ☐ the nature of MGP Waste contamination both in the footprints of former MGPs and in
- 24 areas outside the footprints;
- 25 ☐ the tendency of MGP Waste contaminants to migrate from one location to another,
- 26 through groundwater and other mechanisms;
- 27 ☐ the tendency of streams, rivers, bays, and other waterways in the vicinity of MGPs to be
- 28 contamination with MGP Wastes.

193. PG&E also had specific knowledge of confirmed MGP Waste contamination  
 and/or signs strongly suggesting, and consistent with, extensive MGP Waste contamination at,

1 and in the vicinity of, the Subject MGP Sites. This knowledge was based on several events  
2 including without limitation the following:

- 3 ☐ 1977, signs of a large plume of MGP Wastes from the Fillmore MGP behind Fair's
- 4 Seawall;
- 5 ☐ 1986, signs of MGP Waste spread on the surface of yards in the Marina district;
- 6 ☐ 1989, another sign of a large plume of MGP Wastes from the Fillmore MGP in the
- 7 center of the semi-enclosed bay formed by Fair's Seawall;
- 8 ☐ 1991, confirmed MGP Waste contamination in saturated soils and groundwater at the
- 9 Marina Substation and calls by DTSC, RWQCB, and its own consultant to investigate
- 10 the larger North Beach MGP site;
- 11 ☐ 1994 and subsequent years, confirmed and reconfirmed MGP Waste contamination in
- 12 Gashouse Cove;
- 13 ☐ 1997, confirmed MGP Waste contamination in soil and groundwater, and signs of MGP
- 14 Waste on surface, at the Gaslight Building;
- 15 ☐ 1997, confirmed MGP Waste contamination in soils and groundwater at the Beach
- 16 Street MGP; and
- 17 ☐ 2006, confirmed MGP Waste contamination on the perimeter of Gashouse Cove
- 18 suspected to be an upland source continuously contaminating the bay.

19 194. Despite its broad expertise and knowledge of confirmed or suspicious indicators  
20 of MGP Waste contamination in the areas of the Subject MGP Sites, PG&E, throughout the EP,  
21 has (and continues to) deliberately concealed, omitted, and/or grossly understated to Plaintiff  
22 Clarke and/or to the public, in PG&E's introduction letter, fact sheet, public and private  
23 meetings, and various other communications, pertinent information including but not limited to  
24 the following:

- 25 ☐ MGP Waste contamination in groundwater and saturated soils at the Subject MGP Sites
- 26 and the fact that MGP Waste contamination migrates from location to location, in part
- 27 through the action of groundwater;
- 28 ☐ MGP Waste contamination in the sediment in Gashouse Cove;

- 1 ☐ MGP Waste contamination in the form of coal tar at the perimeter of Gashouse Cove;
- 2 ☐ Upland sources of MGP Waste contamination that are continuing to contaminate
- 3 Gashouse Cove and would re-contaminate the cove if it is dredged;
- 4 ☐ The connection between MGP Waste contamination in Gashouse Cove and the North
- 5 Beach MGP which borders on it;
- 6 ☐ The solid MGP Waste sometimes called black rocks, lampblack, clinkers, etc.
- 7 commonly found in shallow soils in the Marina, which has been confirmed to contain
- 8 very high levels of PAHs that are known carcinogens;
- 9 ☐ Extensive deposits of “creosote” found along Marina Boulevard, the connection between
- 10 that those deposits and the Fillmore MGP, and the related plume of MGP Waste
- 11 contamination outside the footprint of the Fillmore MGP, extending under several
- 12 residential blocks of the Marina and under the Marina Green to its embankment where it
- 13 abuts and/or extends into the San Francisco Bay;
- 14 ☐ The connection between the grossly contaminated Beach Street MGP and PAH
- 15 contamination recently found in shallow sediment at Pier 39; and
- 16 ☐ The use of solid MGP Wastes and/or other contaminated debris from the North Beach
- 17 MGP after it was damaged in the 1906 earthquake as landfill to enclose the canal
- 18 between the North Beach MGP’s artificial mole and Fair’s Seawall.

19 **2. PG&E Has Actively Promoted the False Impression That the MGP**  
 20 **Wastes Only Present an Unlikely-But-Remotely-Possible Health**  
 21 **Threat to Deflect Attention Away from the Wastes’ True Dangers**

22 195. As the foregoing sections make clear, MGP Wastes are highly toxic to human  
 23 health and the environment. However, PG&E has carefully managed both what data are  
 24 collected concerning the MGP Wastes at, and in the vicinity of, the Subject MGP Sites and the  
 25 public perception of the threats they pose to human health and the environment.

26 196. As discussed herein, the Marina neighborhood was the historical location of two  
 27 large MGPs and the data that exist show, despite the so far piecemeal nature of the testing that  
 28 has been done, the strong likelihood of extensive and widespread and spreading MGP Waste  
 contamination throughout the neighborhood. Nonetheless, PG&E has encouraged a false



1 perception that the contamination is small-scale and limited in location through means including  
 2 without limitation engaging in testing on a limited piecemeal, as opposed to comprehensive site-  
 3 wide, manner and omitting any testing of groundwater, saturated soils, or soils below the water  
 4 table.

5 197. The Beach Street MGP is known to sit above groundwater heavily  
 6 contaminated by MGP Waste. Nonetheless, PG&E has made no effort to test and remediate  
 7 areas outside of its historical footprint and strongly resisted recent efforts to test in the hotel that  
 8 now occupies the current site.

9 198. Concerning the MGP Waste contamination in the Marina neighborhood of which  
 10 PG&E does admit the existence, PG&E consistently encourages an understanding that the waste  
 11 is only dangerous to human health if there is direct contact with the waste, and that such contact  
 12 is very unlikely because of the depth of the MGP Wastes in the soil. Furthermore, PG&E, by  
 13 completely omitting any discussion of it, encourages the understanding that MGP Waste  
 14 presents no threat to the environment.

15 199. These understandings are false. Much of the solid MGP Waste is close to surface  
 16 and groundwater is contaminated by PAHs. This groundwater provides an effective medium for  
 17 transport of those PAHs to locations from which they can enter homes in a gaseous form,  
 18 especially where, as in the Marina neighborhood, the water table is extremely shallow.  
 19 Furthermore, these MGP Wastes present a very significant danger to the environment.

20 200. Having encouraged the false understanding that the MGP Wastes do not present  
 21 a serious danger to human health or the environment, PG&E has encouraged the impression that  
 22 it has agreed to accept responsibility for the MGP Wastes and remove it as act of good  
 23 corporate citizenship. However, in fact, its true motivation is to take advantage of an unusually  
 24 favorable arrangement with the CPUC, by which PG&E is able to reduce its MGP liability at  
 25 almost no cost by shifting almost all of it ratepayers.

26 201. PG&E has admitted its liability for MGP Waste contamination resulting from its  
 27 ownership, operation, and disposal of MGP Wastes related to the Subject MGP Sites. However,  
 28 as PG&E's shareholders were first informed in its 2009 Annual Report, PG&E's arrangement

1 with the CPUC insulates the company from the great bulk of the financial consequence of this  
 2 liability:

3 [T]he Utility recently contacted the owners of property located on three former  
 4 MGP sites in urban, residential areas of San Francisco to offer to test the soil for  
 5 residues, and depending on the results of such tests, to take appropriate remedial  
 6 action. . . . ***The Utility expects that it will recover 90% of the costs to remediate  
 7 MGP sites under a ratemaking mechanism established by the CPUC.*** The  
 8 Utility will seek to recover remaining costs through insurance. . . . The CPUC  
 9 has established a special ratemaking mechanism under which the Utility is  
 10 authorized to ***recover 90% of environmental costs associated with hazardous  
 11 waste remediation, including the cleanup of these MGP sites, without a  
 12 reasonableness review...***

13 (emphasis added).

14 202. So lucrative is this arrangement for PG&E that it has used not so subtle threats to  
 15 homeowners to discourage any from not going along with the EP and has falsely downplayed  
 16 the negative outcomes for homeowners of going along with it.

17 203. For example, at a 2010 public meeting with affected homeowners concerning the  
 18 EP, a veteran PG&E employee knowledgeable of many MGP investigations was brought in to  
 19 speak. The employee introduced himself, briefly alluded to his knowledge and experience on  
 20 MGP projects, and proceeded to tell the story of two MGP cleanup projects. These two projects  
 21 had completely opposite outcomes for the residents triggered by the behavior of the residents. In  
 22 one project, the residents fought PG&E through legal means and of course PG&E defeated  
 23 them. PG&E was not inclined to be very generous with those residents. In the other project, the  
 24 residents were naturally inconvenienced by the cleanup but saw that it was inevitable and went  
 25 along without a fuss. PG&E helped these residents both physically and financially. The message  
 26 was hard to miss.

27 204. PG&E has also falsely downplayed the likelihood that homeowners would be  
 28 required to enter into an LUC, which would likely permanently stigmatize the property and  
 reduce its value. In order to induce homeowners to participate in the EP, PG&E, if they  
 mentioned it, initially characterized the possibility that homeowners would have to enter an  
 LUC as extremely remote, occurring [paraphrasing] *only if DTSC thinks it's necessary because  
 we can't clean up 100% of the contamination, that is if we find any contamination at all.* Then,

little-by-little, homeowners who cooperated learned that an LUC was all but inevitable. Virtually every property tested to date has enough contamination to warrant a remediation and, almost always, such remediation includes the requirement of an LUC.

### 3. PG&E Has Grossly Misled Plaintiffs and the Public About Oversight on Past Investigations of MGP Waste

205. Since the beginning, PG&E has been using a fact sheet to inform the public of its EP. It contains very carefully worded but nonetheless false and misleading statements about earlier investigations, including:

- Concerning the Gaslight Building remediation in the 1990s, PG&E says: “We worked with one of these owners to remove soil from a portion of their property – no further work was requested by the owner. This work was completed under the oversight of the Regional Water Quality Control Board.” This is referring to the ‘scoop and run’ at the Gaslight Building in 1997 discussed above.
- Concerning Marina Substation testing in the 1990s, PG&E says: “The other owner was satisfied with the test results and made no request for further work.” This is referring to the Marina Substation testing in 1991 discussed above.

206. In the first quote, PG&E uses the word ‘oversight’ to imply something significantly more than what actually took place. As discussed, RWQCB had no knowledge of this work and PG&E skirted the oversight through dubious means.

207. In the second quote, PG&E speaks of an “other owner” who was apparently satisfied with the test results and makes no request for further work. But the property is the Marina Substation, so PG&E is committing a deception of omission by failing to mention that ***PG&E itself*** is the “other owner.” The fact that the entity liable for any remediation costs made the decision that no remediation was necessary is a much different reality that which is intentionally and falsely suggested by the quote: to whit that an independent third party gave the property a passing grade. This is made further misleading by the fact that, while PG&E was satisfied and made no request for further work, DTSC, RWQCB, and its own consultant were not at all satisfied, and all three requested further work. Indeed, that the lead agency overseeing

1 this investigation, DTSC, demanded (but was ignored) further work across the whole 9.5 acre  
2 North Beach MGP Site and that both soil and groundwater be tested.

3 **VI. Plaintiffs Have Complied with the Notice Requirements under RCRA and CWA**

4 208. On April 29, 2014, Plaintiffs sent, via certified mail return receipt requested,  
5 PG&E, DTSC, US/EPA, CAL/EPA, the State Water Resources Control Board, and the San  
6 Francisco RWQCB with written notice of PG&E's violations of RCRA and CWA.

7 **CLAIMS FOR RELIEF**

8 **COUNT 1**

9 **Violations of the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 *et seq.***  
10 **(by all Plaintiffs)**

11 209. Plaintiffs incorporate by reference all the allegations contained in the previous  
12 paragraphs as though fully set forth herein.

13 210. PG&E has contributed to the disposal of MGP Waste on the Clarke Home, in the  
14 waters of the San Francisco Bay, and in the tidal and submerged lands below the Bay.

15 211. PG&E dumped, leaked, discharged, spilled, injected, and/or placed MGP Waste  
16 on and/or into the Clarke Home, and/or MGP Waste dumped, discharged, spilled, injected,  
17 and/or placed by PG&E elsewhere on and/or into land and/or groundwater in the vicinity of the  
18 Clarke Home leaked, and continue to leak, into the Clarke Home.

19 212. PG&E dumped, leaked, discharged, spilled, injected, and/or placed MGP Waste  
20 on and/or into the waters of the San Francisco Bay and tidal and submerged lands below the  
21 Bay, and/or MGP Waste dumped, discharged, spilled, injected, and/or placed by PG&E  
22 elsewhere on and/or into land and/or groundwater in the vicinity of the San Francisco Bay  
23 leaked, and continue to leak, into the waters of the San Francisco Bay and the tidal and  
24 submerged lands below it.

25 213. The MGP Waste the disposal of which PG&E has contributed as described  
26 herein is solid waste and/or is hazardous waste, which presents an imminent and substantial  
27 endangerment to health and/or the environment, and/or may present an imminent and  
28 substantial threat to health and/or the environment.

WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.

**COUNT 2****Violations of the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*  
(by all Plaintiffs)**

214. Plaintiffs incorporate by reference all the allegations contained in the previous paragraphs as though fully set forth herein.

215. PG&E has violated, and continues to violate, effluent standards and limitations as defined under section 505(f) of the CWA, 33 U.S.C. § 1365(f), by discharging pollutants into the waters of the United States without a permit required by CWA section 301(a), 33 U.S.C. § 1311(a).

216. The toxic chemicals from the MGP Wastes located in the soil of the MGP Sites qualify as a pollutants, including without limitation based on their inclusion of carcinogenic PAHs that are known to be harmful to marine life, including without limitation fertilized herring eggs and larval herring. Indeed, several of the PAHs known to exist in the MGP Wastes located on the MGP Sites are on a list of identified “toxic pollutants” issued by the EPA. These include: acenaphthene; fluoranthene; and naphthalene. *See* 40 C.F.R. § 401.15. The CWA defines “toxic pollutants” as “those pollutants, or combinations of pollutants . . . which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will . . . cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.” 22 U.S.C. § 1362(13). This definition is on all fours in relation to PAHs and their effects on fertilized herring eggs and larval herring.

217. The MGP Sites on which the MGP Wastes were disposed by PG&E qualifies a point source of these pollutants.

218. These pollutants are discharged on the San Francisco Bay via groundwater that flows through these MGP Sites into the Bay, via large event stormwater runoff that is transported directly into the Bay through outfall pipes, via CCSF’s wastewater system, directly via MGP Wastes in soils on the Bay’s shoreline, tidelands, submerged lands, and/or via direct disposal by PG&E of the MGP Wastes into the Bay.

WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.

220. Plaintiffs incorporate by reference all the allegations contained in the previous paragraphs as though fully set forth herein.

221. PG&E by causing, as alleged herein, MGP Waste to be disposed in and around the Marina District and the Fisherman's Wharf District, including without limitation areas therein containing groundwater and areas within and below the San Francisco Bay, and/or failing, as alleged herein, to adequately remediate the contamination of terrestrial and aquatic areas caused by such disposal have created a condition that is harmful to health, is offensive to the senses, and/or interferes with the comfortable enjoyment of life or property.

222. This conditions affects a substantial number of people at the same time, including without limitation: residents of the Marina District and North Beach District; commercial and recreational fishermen that depend on the productivity and abundance of fish species that lay eggs in the waters of the San Francisco Bay in the vicinity of the Marina District and North Beach District; and people that otherwise enjoy the environmental services provided by such fish.

223. The seriousness and/or gravity of this harm out weighs the social utility of PG&E's conduct alleged herein.

224. Plaintiffs did not consent to PG&E's aforementioned conduct.

225. Plaintiffs have suffered harm that is different from the type of harm suffered by the general public. These harms include the interference with the free use and enjoyment of Clarke Home that Clarke has suffered and decreased abundance and productivity and the resulting injuries to their economic livelihoods that SFHA members have suffered.

226. PG&E's conduct alleged herein was a substantial factor in causing Plaintiffs' harms. And as a direct and legal cause of the PG&E's wrongful acts and/or omissions alleged

herein, Plaintiffs have suffered and will suffer harms, injuries, and/or losses as herein set forth, economic and otherwise.

227. The acts and omissions of PG&E alleged herein were done with malice, fraud, and/or oppression as herein set forth.

WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.

**COUNT 4**  
**Violations of California State Nuisance Law, Cal. Civil §§ 3479 *et seq.* – Private Nuisance (by Clarke)**

228. Plaintiffs incorporate by reference all the allegations contained in the previous paragraphs as though fully set forth herein.

229. Clarke is the owner of the Clarke Home with his wife; and Clarke occupies the Clarke Home with his wife.

230. PG&E by causing, as alleged herein, MGP Wastes to be disposed in and around the Marina District, including without limitation in the soils of the Clarke Home and in soils adjacent to, and/or in the vicinity of, the Clarke Home from which MGP Wastes and/or components thereof have migrated into the Clarke Home, and/or failing, as alleged herein, to adequately remediate the contamination of terrestrial and aquatic areas caused by such disposal have created a condition that is harmful to health, is offensive to the senses, and/or interferes with Clarke's comfortable enjoyment of life or property.

231. This condition has interfered, interferes, and is substantially certain to interfere with Clarke's free use or enjoyment of the Clarke Home, and has reduced the value thereof and has caused, is causing, and is likely to cause in the future, substantial emotional distress and inconvenience.

232. Clarke and his wife did not consent to PG&E's conduct alleged herein.

233. An ordinary person would be reasonably annoyed or disturbed by PG&E's conduct alleged herein.

234. PG&E's conduct alleged herein was a substantial factor in causing Clarke's harm. And as a direct and legal cause of the PG&E's wrongful acts and/or omissions alleged



herein, Plaintiffs have suffered and will suffer harms, injuries, and/or losses as herein set forth, economic or otherwise.

235. The seriousness and/or gravity of this harm out weighs the social utility of PG&E's conduct alleged herein.

236. The acts and omissions of PG&E alleged herein were done with malice, fraud, and/or oppression as herein set forth.

WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.

**COUNT 5**  
**Violations of California State Trespass Law**  
**(by Clarke)**

237. Plaintiffs incorporate by reference all the allegations contained in the previous paragraphs as though fully set forth herein.

238. Clarke is the owner of the Clarke Home with his wife; and Clarke occupies the Clarke Home with his wife.

239. Without Clarke's consent or that of his wife, PG&E intentionally, recklessly, or negligently entered the Clarke Home, by way of allowing MGP Waste under Defendants' control to escape into the environment and settle onto and into the Clarke Home. PG&E's operation of the Marina MGP's further constitutes an ultrahazardous activity.

240. As a proximate result of PG&E's entry onto the Clarke Home, Clarke has been injured, is being injured, and is substantially certain to be injured in the future, including but not limited to lost use of property, lost profits, lost rents, denial of useful and quiet enjoyment of property, diminution in the fair market value of property, and losses related to MGP contamination, which has caused said properties to be stigmatized.

241. The wrongful acts of Defendants were done maliciously, oppressively, and fraudulently, as herein set forth.

WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.

**COUNT 6**  
**Violations of California State Negligence Law**  
**(by all Plaintiffs)**

242. Plaintiffs incorporate by reference all the allegations contained in the previous paragraphs as though fully set forth herein.

243. PG&E was negligent in its acts and omissions concerning MGP Wastes at and/or in the vicinity of the subject sites, including without limitation its storage, disposal, cleanup, and remediation of such MGP Wastes.

244. As a proximate result of these negligent actions, Plaintiffs have been harmed including without limitation in the ways set forth herein.

WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.

**COUNT 7**  
**Violations of California State Strict Liability Law**  
**(by all Plaintiffs)**

245. Plaintiffs incorporate by reference all the allegations contained in the previous paragraphs as though fully set forth herein.

246. PG&E was engaged in the operation of MGPs, which includes without limitation the creation and refinement of gas from coal and oil and disposal of wastes created thereby; the operation of an MGP constitutes an ultrahazardous activity.

247. The harms suffered by Plaintiffs, as set forth herein, are the kinds of harms that would be anticipated as a result of the risk created by operation of MGPs.

248. As a proximate result of PG&E's operation of MGPs, Plaintiffs have been harmed in the manners set forth herein.

WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.

**COUNT 7**  
**Declaratory Relief And Request for Monitoring of Contamination**  
**(by SFHA)**

249. Plaintiffs incorporate by reference all the allegations contained in the previous paragraphs as though fully set forth herein.

250. As a direct and legal result of the acts and omissions of the PG&E, contributing to and/or causing toxic pollutants from MGP Wastes, including without limitation pollutants

1 with high levels of PAHs, to enter the waters of the San Francisco Bay and the lands underlying  
2 them, and failing to adequately monitor or test such pollution, Plaintiffs have been denied the  
3 ability to assure themselves that the San Francisco Bay's herring stock, and the fertility thereof,  
4 is not being materially harmed by such pollution.

5 251. This inability to assure themselves has caused, and will cause, economic injury  
6 to SFHA's members who depend upon the productivity and abundance of the San Francisco  
7 Bay's herring stock for their ability to commercially harvest herring and make economic  
8 planning decisions based on the productivity and abundance of that stock.

9 252. Monitoring and testing procedures exist which make the detection and evaluation  
10 of PAH pollution in marine waters and tidal and submerged lands possible and beneficial.

11 253. Assuring that the San Francisco Bay's herring stock, and the abundance and  
12 productivity thereof, is not being materially harmed by pollution from MGP Waste can only be  
13 accomplished by the creation of a MGP Waste marine contamination monitoring fund to  
14 provide a MGP Waste monitoring program, including periodic and regular testing of waters in  
15 the San Francisco Bay in the vicinity of the Marina and Fisherman's Wharf neighborhoods and  
16 the tidal and submerged lands underlying them for MGP Waste contamination.

17 254. SFHA's members have no adequate remedy at law in that monetary damages  
18 alone do not compensate for the continuing nature of the harm to them, and a monitoring  
19 program which assures them the San Francisco Bay's herring stock, and the abundance and  
20 productivity thereof, is not being materially harmed by MGP Waste contamination is necessary  
21 to protect the health of the San Francisco Bay's herring stock on which SFHA's members  
22 economically depend.

23 255. Without a court-approved monitoring program and a declaration of the rights of  
24 the SFHA and its members to such a monitoring program, the health of the San Francisco Bay's  
25 herring stock on which SFHA's members economically depend cannot be protected.

26 WHEREFORE, Plaintiffs pray for relief as hereinafter set forth.  
27  
28

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs pray for judgment and further relief as follows:

1. This Court declare PG&E in violation of the RCRA.
2. This Court declare PG&E in violation of the CWA.
3. This Court declare PG&E responsible for remediation of the MGP Wastes located on and/or the vicinity of the Subject Sites, including without limitation those MGP Wastes on the Clarke Home, in the waters of the San Francisco Bay, in tidal and submerged lands below the San Francisco Bay, and in the groundwater of the Marina and Fisherman's Wharf neighborhoods of San Francisco, whether such MGP Wastes are located there now or migrate there in the future.
4. This Court permanently enjoin PG&E to fully and adequately remediate the Clarke Home of MGP Wastes;
5. This Court permanently enjoin PG&E to take the actions necessary to prevent the Clarke Home from being re-contaminated by MGP Wastes in the future from MGP Wastes in other locations;
6. This Court permanently enjoin PG&E to take all other actions necessary to ensure that the MGP Wastes on the Clarke Home and/or in the vicinity thereof do not present, and will not present in the future, a substantial danger to human health or the environment;
7. This Court permanently enjoin PG&E to fully and adequately remediate the MGP Wastes that substantially endanger, and or may substantially endanger, the environment of San Francisco Bay;
8. This Court permanently enjoin PG&E to take the actions necessary to prevent the San Francisco Bay and the tidal and submerged lands below it from being re-contaminated by MGP Wastes in the future from MGP Wastes in other locations;
9. This Court permanently enjoin PG&E to take all other actions necessary to ensure that the MGP Wastes in the San Francisco Bay and the tidal and submerged lands below

1 it and/or in the vicinity thereof do not present, and will not present in the future, a substantial  
2 danger to human health or the environment;

3 10. This Court award Plaintiffs damages in an amount to proved at trial;

4 11. This Court award Plaintiffs the costs of suit herein, including attorneys' fees and  
5 expert witness fees, including without limitation pursuant to 33 U.S.C. § 1365(d) and 42 U.S.C.  
6 § 6972(e); and

7 12. This Court grant such other and further equitable or legal relief as the Court  
8 deems just and proper.

9  
10 Dated: September 30, 2014

**GROSS LAW, P.C.**

11  
12  
13 By: /s/ Stuart G. Gross  
STUART G. GROSS

14 *Counsel for Plaintiffs*  
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**DEMAND FOR JURY TRIAL**

Pursuant to Fed. R. Civ. P. 38(b), Plaintiffs demand a trial by jury of all of the claims asserted in this Complaint so triable.

Dated: September 30, 2014

**GROSS LAW, P.C.**

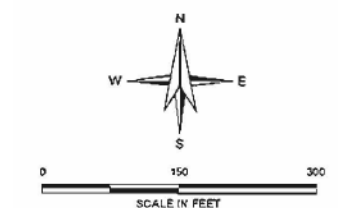
By: /s/ Stuart G. Gross  
STUART G. GROSS  
*Counsel for Plaintiffs*

# EXHIBIT A





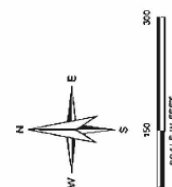
**North Beach MGP**



# EXHIBIT B



**Fillmore MGP**

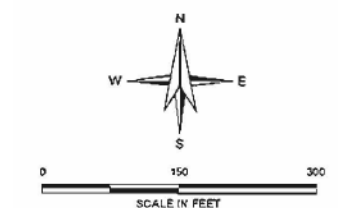


# EXHIBIT C

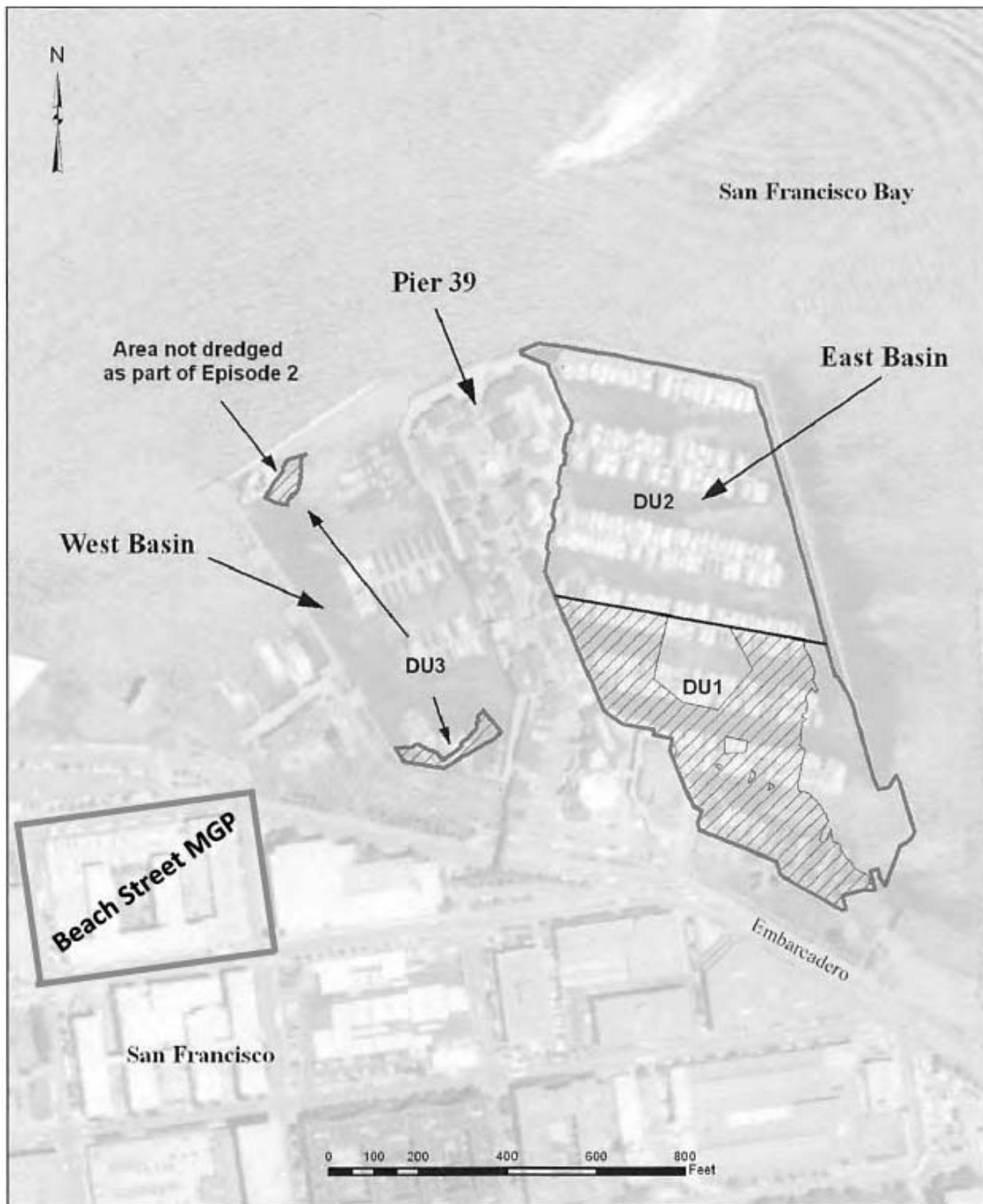




**Beach St. MGP**



# EXHIBIT D



**Legend**

- Project Area
- Total PAH > Essential Fish Habitat bioaccumulation trigger (USEPA/ESACE 2012)

**Pier 39**